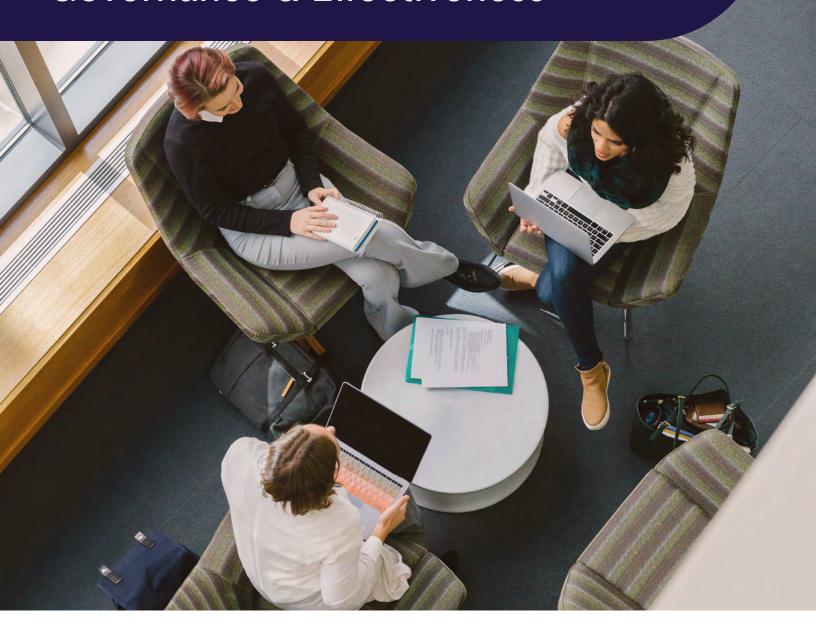
WHITE PAPER

Moving the Board Forward: How Digital Advances Tap Improved Governance & Effectiveness





Introduction: Safer, Faster, Smarter, and More Effective

In recent years, the expectations of corporate boards have increased significantly to encompass an ever-growing list of topics, such as cybersecurity; environmental, social, and governance (ESG) issues; diversity, equality, and inclusion (DEI); and COVID-19 pandemic response and recovery. These factors and trends are actively redefining what corporate boards look like, who gets to be a board director, how the boardroom functions, and what is expected of individual directors.

As the expectations of corporate boards continue to evolve, so does the need for efficiencies in boardroom technology and administration. The accelerated adoption of digital technologies and virtual meetings spurred by the pandemic has allowed boards to realize efficiencies on an all new scale, as they have ditched physical board books for mobile devices with multifactor authentication, or used analytics to build smart, data-driven board agendas.

The promise of boardroom technology is not that it transforms the nature of board meetings themselves. Rather, it is that everything runs faster, smarter, and more effectively. According to a recent OnBoard study, 81% of surveyed boards that use board management software noted an improvement in board effectiveness. Among boards that don't use such software, only 58% reported increased effectiveness.

For forward thinkers in the boardroom technology space, this is just the beginning of a new era. "I look at it as different arcs of innovation," says Paroon Chadha, co-founder and CEO of OnBoard. "The first arc was moving from delivering board information in an analog format and transforming it for a digital format. Then, at the start of the COVID-19 crisis, all board meetings became not just digital, but also virtual. That led to the big arc of innovation I see today. We have all adapted to a digital and virtual format; now let's leverage it."

In this publication, we'll cover the ways digital and virtual technology are transforming:

- · Board meeting preparation
- · Hosting board and committee meetings
- · Board meeting analytics
- · Board meeting security
- The future of corporate board meetings



Preparing for Board Meetings

Before COVID-19, deadlines for board meeting materials often were dictated by how long it took to print and ship board books to each director. At the onset of the pandemic, these deadlines were stripped away, as boardrooms around the world increased their adoption of board portals.

Corporate governance professionals say the use of board portals has led to greater flexibility in their workflows ahead of board meetings. For instance, certain materials or sections of materials can be posted to the portal when they are ready, allowing directors more time to review them. In the analog world, everything had to be pieced together for the same deadline.

"Our use of board portals has changed for the better," says Rose Marie Glazer, executive vice president and chief human resources officer at AIG. "We're not printing and FedExing overnight delivery materials for half the board members. Now we post our materials to the portal and it has almost completely eliminated the need to email directors."

Beyond the security benefits of navigating away from personal email addresses (see page 7 for more information), Chadha says the move away from physical materials has a huge additional benefit: "Board books are full of privileged information that often ended up stacked in someone's basement after use. The duty of care is often overlooked when it comes to board materials but, in the digital world, you have much more control over it."

In addition to logistical efficiencies and technical security, some boards are realizing the use of portals can expand the list of reading materials offered to board directors ahead of a meeting, notes Mary Francis, chief governance officer at Chevron.

"We continue to ask ourselves what we would want access to if we were directors," Francis says. "In some cases, the material lives on our website, but we make it easy for our directors to access it with one click, rather than seven or eight. From a governance perspective, we have to be diligent with the upkeep – replacing documents when a new version is released. In general, we find that we're incrementally leveraging the portal much more."



Did you know?

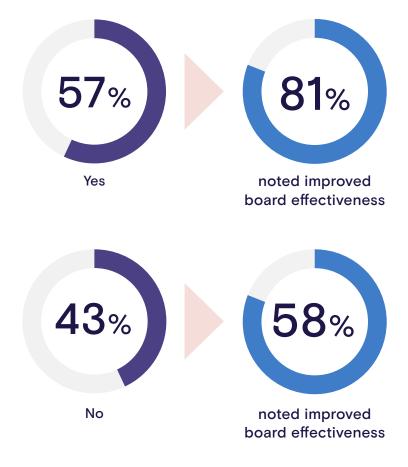
Among those who use board management software, **81% said they increased board effectiveness in the last 12 months**. For those without board management software, only 58% believe they increased board effectiveness.

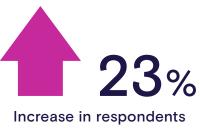
At Chevron, meeting planning starts with a discussion about how satisfied the directors were with the materials they had for the prior meeting. "After each board meeting, we get together and talk about what we heard from the different committees and across the meeting as a whole," Francis says. "That informs what we plan for subsequent meetings in terms of presentations, briefs, and guest speakers. It drives what information we make accessible to our directors in the portal. We definitely tailor it based on feedback from the board."

The next generation of boardroom technology will be able to quantify this anecdotal feedback for corporate secretaries and other governance professionals, Chadha explains. "On our platform, we allow annotation to the board book and share an annotation heat map - much like when you read a book on a Kindle and you can see the most popular highlights," he says. "This allows directors to anticipate where questions are going to be asked and what to prepare for. In some cases, this has led to people changing the board agenda based on the popular annotations."



Has board effectiveness improved?



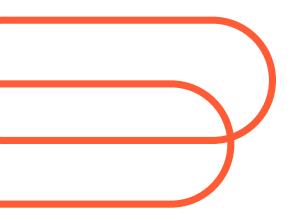


using board management software noting improved board effectiveness

Hosting the Board Meeting

For many governance professionals, stage one of hosting a virtual meeting is about selecting the right technology and deciding how to host the meeting itself – making decisions about whether to conduct the meeting via video or audio-only. After some initial incidents of security breaches with virtual meeting providers early in the pandemic, a few best practices emerged. These include ensuring that meeting participants use a passcode to enter the meeting and enabling a waiting room so the host can verify identities before admitting attendees.

Once boards could be assured their meetings were secure, then came questions about how to make the most of the virtual format. In many cases – at AIG and Chevron, for example – directors were encouraged to turn on their cameras and provided a <u>best practice</u> guide for lighting, camera placement, and sound quality. These best practice guides were posted to the board portals. "It's been an iterative process," Francis says. "But we've ultimately been successful in making sure everyone has an optimal experience."





By using a virtual format, it's possible to codify some aspects of a board meeting that may have been less structured previously. The best example is a timekeeping tool, which can provide board directors and administrators time cues to notify them how far through the agenda they are relative to the overall scheduled time for the meeting. By pairing this with smart agenda building, boards can determine how much time to allocate to a specific agenda item based on director highlights and input, and then keep tabs on that visually during the meeting.

"We've created a real-time clock that tells you where you are in the discussion and how much time you have remaining," says Chadha. "In an in-person meeting, somebody looks at their watch as a cue for the speaker to hurry up because they may be short on time. But in a virtual meeting, you don't have the benefit of those cues. This is an example of the innovation cycle: timekeeping used to be an unpleasant job for one person to do. Now your tablet or other device will help you understand how much time you have allotted for a topic and whether you need to pick up the pace."



Other examples of innovations that can be realized through greater adoption of digital tools and virtual meetings are analytics and director ratings. As the number of virtual board and committee meetings increases, so does the amount of data that can be gathered about what works and what can be improved.

"With our software, we're starting to ask directors to rate each meeting at the end," says Mick Cobb, chief technology officer at OnBoard. "We're asking for input on what directors appreciated and what worked. Over time, we will be able to build an understanding, through analytics, of what works well in each industry, market cap size, or any number of other variables. By having access to this powerful data, we can coach boards on how to improve their meetings."

The idea of boardroom analytics has sometimes raised concerns, for fear it may disrupt the collegiality of the boardroom by veering too close to tracking individual director performance. But Cobb explains the future of boardroom analytics will emphasize topics such as timekeeping, the effectiveness of the meeting, and director satisfaction.

"Boards tend to do an assessment, maybe at the end of the year, but there's no board-wide feedback on the meeting itself," Chadha says. "There are a number of issues – from starting on time and cramming too much into a meeting, to assigning topics for committee discussions. Ratings give you a chance to capture that information empirically. This wouldn't be in place of the overall annual board assessment, but it could allow for more effective meetings, planning, and assessments."



Did you know?

Among those who use board management software, **94% have board members who are prepared for meetings**, compared with 88% for those who do not use board management software.

Cybersecurity for Boardroom Technology

The threat of <u>cybersecurity</u> attacks have become a reality for many companies in recent years. There has been a notable uptick in artificial intelligence (AI) malware attacks, as well as increasingly sophisticated phishing scams. For corporate secretaries and other governance professionals, this raises concerns about how to conduct board meetings and share materials with directors in a secure manner.

As a first step, governance professionals should ensure directors are using secure devices with multi-factor authentication – preferably with some form of biometric identification, says Cobb. In addition to the security benefits of multi-factor authentication, these devices can be remotely wiped by an administrator if they are misplaced. Beyond this, however, Cobb says there are several things corporate secretaries should do to strengthen board meeting security.

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Mary Francis, Chief Governance Officer, Chevron For starters, when selecting a board technology provider, they should ask whether the provider has ISO certification for information security and quality management. Corporate secretaries also should filter all director communications through the secure, encrypted board portal, which virtually nullifies phishing scam threats.

Cybersecurity has been a large focus at Chevron. "We take no chances on this," Francis says. "We test technology and if our testing exposes any vulnerability, we don't do it. We did a lot of testing on facial recognition authentication for iPads, which directors liked because everyone has too many passwords to remember as it is. Beyond that, we are constantly reminding our directors that the portal is their vehicle. We tell them that they should not be sending emails or sensitive messages via text. If there's something that needs to be discussed, they know to pick up the phone or use the board portal."

The next generation of data security for boardroom technology lies in data encryption, Cobb says.

Modern board portals typically offer multiple levels of encryption as part of the software, but he says the next wave of innovation will put control firmly in the hands of the company using the board portal.

"One of the biggest concerns for users today is around encryption," Cobb says. "We have a very advanced encryption mechanism for board materials, where documents are stored in an isolated, secure storage unit for each customer and encrypted multiple times. But what we're working on now will allow customers to use their own encryption keys that we – as the portal provider – don't have access to. Customers will tell us where their encryption keys are and we'll use them, but as soon as the customers want to withdraw that access, they can. It will provide a new, even more secure, level of protection for document storage."

How Technology Has Transformed Other Board Processes

In addition to increased use of board portals and virtual board meetings, the pandemic also has led to much greater adoption of tools like e-signatures, online <u>D&O questionnaires</u>, and <u>minutes builders</u>. These tools can provide corporate secretaries and governance professionals with valuable efficiencies and security, according to Glazer at AIG.

"We took the opportunity to introduce some productivity tools that otherwise directors were a bit reticent to adopt," she says. "We now use e-signatures for any of our regulatory filings and for approval of board minutes. The board has adapted very well and it's helped us save time.

"We also were able to host our D&O questionnaire and board assessment online this year. That has been very well received and I'm very hopeful that post-COVID-19, we will keep sailing straight through with these changes, rather than reverting to the old ways of using paper forms that can be difficult to store and manage."



Glazer says the initial investment of time to learn the tools was well worthwhile. "The first time we used these tools, it was hard – we had to do lots of training and hand-holding," she says. "But now we're in a position where we can keep a record each year of what has transpired. Much of that is automated, which saves us a lot of time. We can easily notify directors of information when they need to know it."



Did you know?

Among those who use board management software, **91% receive board materials three or more days in advance**, compared with 78% for those with no software.

The Future of Boardroom Technology

The COVID-19 pandemic sped up the adoption curve for boardroom technology, and the efficiencies that have been realized are here to stay. The effective use of board portals, e-signatures, online D&O questionnaires, and minutes builders have saved corporate secretaries time and led to better experiences for board directors. Likewise, the ability to host board meetings virtually has been eye-opening for many company boards. While the collegiality of the boardroom can't be replicated as effectively in a virtual format, the benefits of less frequent travel and the ability to attract a more geographically diverse board are significant.

"We're likely to just hardwire one or two meetings to be virtual every year," Francis says. "We have directors on the East Coast and one in London. The wear and tear of showing up for a board meeting with a light agenda might not be appreciated. We're all aware the technology exists now to allow people to participate effectively remotely."

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We are already prototyping some machine learning that can actually detect the sentiment of a meeting, or specific speakers, and can look for patterns within meetings.

Mick Cobb Chief Technology Officer, OnBoard This also can be helpful given that board directors may have moved during the pandemic, Chadha points out. "The expectations of some directors have changed," he says. "They may actually want to join in from another location – perhaps working from home. The way work is wired has been reconfigured, pointing toward a hybrid board meetings format on an ongoing basis."

For Chevron, this requires rethinking the physical boardrooms where meetings take place, Francis says. "We're talking to other companies about how they've reconfigured their boardrooms to allow improved remote participation for an otherwise in-person meeting," she says. "We think that's going to be the expectation of our directors, and we need to get the hybrid meeting quality up to the same standard as our purely virtual meetings."

Cobb is excited about the potential to use artificial intelligence tools to analyze the effectiveness of meetings, based on aggregated data. "We are already prototyping some machine learning that can actually detect the sentiment of a meeting, or specific speakers, and look for patterns within meetings," he says. "It can help us better understand the tone of a meeting and how it went, as well as inform the agenda for the next meeting. Meeting ratings are really one of our first forays into collecting information and looking at how that can help us become coaches in boardroom best practices."

The future is bright for boardroom technology. The improved efficiencies and effectiveness of meetings in recent years have paved the way for greater adoption of boardroom technologies and future innovations.



About OnBoard

At OnBoard, we believe board meetings should be informed, effective, and uncomplicated. That's why we give boards and leadership teams an elegant solution that simplifies governance. OnBoard is the leading board management provider with customers spanning higher education, nonprofit, health care, government, and corporate enterprise business.