Akin®

Top 10 Topics for Directors in 2020: Corporate Innovation

Mar 11, 2020

Reading Time : **5 min**

Use Board's Oversight

A board's role includes oversight with respect to technology spending and strategy. To do so effectively, some technological expertise is often necessary to fully understand the risks and benefits of adopting an innovation and emerging technologies course of action.

The task of understanding the complexities of emerging technologies can be daunting to some directors. There is certainly no shortage of buzzwords—blockchain, artificial intelligence (AI), Internet of Things (IoT), Fifth Generation Wireless Networking Technology (5G), drones, augmented reality, big data, edge computing and digital assets, to name a few. Staying informed of potential business advancements and use cases is crucial to the board's strategic oversight with respect to technology. *(A brief explanation of some of the most significant emerging technologies and examples of use cases in various industries is included at the end of this article.)*

Access to outside experts as well as technology resources within the company is essential to board education. An emergent best practice for boards involves regular updates from the company's chief information officer or chief technology officer. These communications are an instructive tool for directors to better understand the company's technology opportunities and challenges.

While many boards initially focused on the need for director technology expertise in the context of evaluating cybersecurity and data privacy risks, some companies are starting to appreciate the benefits that tech-savvy board members can bring to the boardroom. These experts assist not only in protecting against risks, but also in guiding innovative strategies and opportunities that positively impact the company's business. A 2019 study conducted by the

Massachusetts Institute of Technology's Center for Information Research concluded that companies with boards that included at least one director with technology expertise outperformed those that did not in several financial metrics—including revenue growth.

In a challenging business environment, many companies are looking to emerging technologies to create efficiencies, improve consumer experience and, ultimately, drive revenue. Companies with boards that are not actively evaluating strategic innovation opportunities now likely will find themselves behind their competitors in the coming years.

In 2020, we expect a growth in the desire of companies to add directors with meaningful technology-related backgrounds and experiences. When selecting new director candidates, nominating committees should consider technology expertise as one of the factors in the overall mix of skills essential for the board to possess. We also expect more companies to create technology committees to focus on both risk mitigation and opportunistic strategy.

Consider Legal and Regulatory Implications

To help guide a company's technology strategy, it's critical that boards think about the potential legal and regulatory implications on the front end. It's no secret that legislation often has difficulty keeping pace with new technologies. However, in 2019, we saw a number of developments that either implemented or signaled impending regulations impacting many emerging technologies, and we expect this trend to continue in 2020. A key driver for this regulatory increase is these technologies' implications for national security, as well as ethical or other novel concerns.

Regulatory considerations include legislation aimed at specific emerging technologies (such as IoT and AI) and legislation impacting technology more generally. This legislation includes the Children's Online Privacy Protection Act (COPPA), import/export control, foreign investment laws and data privacy regulations. Other developments include the Securities and Exchange Commission (SEC), Commodity Futures Trading Commission (CFTC) and Internal Revenue Service (IRS) efforts relating to digital assets and cryptocurrencies.

Boards may also need to consider the implications of existing regulations with no context in emerging technologies so they can work with regulators in a collaborative manner, and steer the company's technology strategy.

Become Familiar with Key Emerging Technologies

Directors should be familiar with the most significant emerging technologies:

- *AI, Deep Learning/Machine Learning and Predictive Analytics* – AI is the ability of computer systems to perform tasks that normally require human intelligence, such as the ability to reason and make decisions, learn from past experiences, recognize speech and utilize visual perception. Applications of AI abound for companies that use or have access to large amounts of data. For example, AI is being used by corporations in multiple industries to implement fraud detection strategies, as well as targeted advertising campaigns. Other applications range from the decision-making abilities of autonomous vehicles to AI-assisted robotics used in surgery.
- *Blockchain* – At the most basic level, a blockchain is a distributed (meaning viewable or editable on multiple devices called "nodes") digital list (or ledger) of transactions (blocks) chained together in chronological order in a manner such that alteration of the chain is detectable. While cryptocurrencies—which typically utilize public ledgers—were the first use of blockchain technology, many industries are finding compelling enterprise use cases for permissioned (or nonpublic) blockchains. Use cases of enterprise blockchain implemented to date include:
    - Payment transactions (for example, to net settle payments between insurers)
    - Content licensing and royalty distribution in the media industry
    - Supply chain management to track food safety and management
    - Security of patient records and pharmaceuticals in the health care industry.

However, directors should be aware that blockchain is not a cure-all. Blockchain use cases that solve a failure in coordination are most likely to be successful in the enterprise context.

- *Extended Reality* – Extended Reality (XR) refers to a range of digital enhancements to the real world, including virtual, augmented and mixed reality. While e-gaming and other forms of entertainment are the most obvious uses of XR today, there are a wide variety of potential uses across industries. Augmented reality is being used in the retail industry to enhance the consumer experience—for example, customers can now virtually try on make-up or clothing. Virtual reality is being used in numerous industries to implement effective employee training programs designed to enhance safety or simulate human interaction, as well as in the medical industry to treat chronic pain.
- *IoT and Edge Computing* – IoT refers to the interconnection of computing devices embedded in objects so they are capable of sending and receiving messages. Edge

computing is, in general, the capability of those devices to compute in or near the source of the data—rather than sending information back and forth from the cloud—which decreases delay or latency.

As businesses deploy connected consumer and industrial devices to implement opportunistic strategies, more and more devices are becoming a part of the IoT and changing the way businesses and end users conduct everyday activities. As with other emerging technologies, IoT and edge computing have a wide assortment of potential uses that will impact companies in a variety of industries, such as health and fitness, home appliances, autonomous vehicles, insurance and energy.

- *Unmanned Aircraft Systems (UAS or Drones)* – UAS are unmanned aircraft and the equipment used to remotely pilot them. There are a growing number of businesses seeking to utilize UAS as part of their business strategies. Companies are using the technology for:
    - Inspection of energy and telecommunications infrastructure
    - Damage assessments in the insurance industry
    - Fulfillment and logistics for the retail industry
    - Monitoring and planting agricultural crops
    - Filming entertainment and sporting events
    - Personal transportation (or urban air mobility).
- *5G* – Fifth-generation wireless networking technology, or 5G, promises significantly faster data speed, lower latency, increased network capacity and increased connection reliability. In addition to impacting the communications industry, 5G will increase the capabilities of many of the other emerging technologies (particularly IoT and XR) and, in turn, have implications across numerous industries in 2020, including:
    - Media and entertainment
    - Retail and manufacturing
    - Energy and utilities
    - Health care
    - Insurance
    - Transportation.

Categories

Policy & Regulation | Technology | Blockchain