

Emerging Technologies: What Directors Need to Know to Drive Shareholder Value

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On February 21st, NACD Chicago members were treated to an incredibly unique program: Emerging Technologies: What Directors Need to Know to Drive Shareholder Value. Our sponsor, Accenture, organized the evening which started with an overview by sponsor representative, Bob Kress of why technology is important and current technology trends. Those key trends include:

- Blockchain
- Artificial Intelligence (AI)
- Internet of Things (IoT) aka Industry X.0
- Workforce of the Future

Attendees then divided into groups and rotated through four enlightening and intellectually stimulating modules, each led by an Accenture expert on the topic. Each module offered insights to understanding that digital technology is dissolving traditional boundaries between industries and creating more opportunities for disruptors to displace incumbents. Although technology has historically been viewed as an enabler of business operations, today, it is also widely seen as a critical driver of growth. As a director, you need to understand these issues to help your board and organization reap the long-term benefits of transformative, new technologies to create shareholder value.

Blockchain – David Treat, Managing Director, Co-lead of Accenture’s blockchain business and Lead of the NY Fintech Innovation Lab

The term blockchain has been a word many of us associate with Bitcoin, so what does that have to do with a traditional business environment? This was the discussion that ensued in the blockchain module. A simple description is that blockchain is digital information (the “block”) stored in a public database (the “chain”). Dave walked the group through the traditional data system – typically message based, and the challenges with those systems:

- Redundancy: Many copies of data maintained by many participants; constant reconciliation
- Copy & Paste: We don’t know where data came from or how it may have been changed
- Control: Blunt control mechanisms; database, table and row access control
- Security: Perimeter based security models regularly breached

Blockchain addresses these issues as the data is traceable, and there is security if someone tries to tamper with the data. At every data element level, there are controls as to who has access and importantly, the data is encrypted and thus secure.

According to Dave, we are in the very early innings of development and use of blockchain, but it is an emerging technology that Accenture believes will be used at every company over time and thus, a key topic that directors need to be aware of.

Artificial Intelligence (AI) - Michael Ljung, Senior Managing Director, and lead of the Intelligent Software Engineering business for Accenture in North America

Once we all accepted the fact that, while driverless cars may not be wide-spread soon, AI is a near-term reality within corporations, the session then focused on avoiding "bias in AI". Machines learn based on images that are fed to them. In fact, creating these images is an industry in itself. Bias happens when what is fed to the computer is biased. An example is that when trying to teach a computer about a cook in a kitchen, because historically this tended to be done by housewives, the computer was biased to believe cooks are women. In a corporation, an example of bias in AI is when Amazon tried to use AI to help in recruiting high-performing employees. They fed the computer examples of several current high-performing employees but neglected to realize that because all the examples were men, the only resumes making it past the screening were men. The key to avoiding bias is making sure the underlying data being used isn't biased.

What directors should be aware of and ask the management teams are: are we using AI, what is the underlying data we are using, and once we start down a path with AI, how are we auditing the outcomes?

Internet of Things (IoT) aka Industry X.0 – Brian Irwin, Managing Director and Lead of Accenture's Automotive and Industrial Products practice across North America, as well as the Products Industry X.0 consulting practice

This module focused on how digital technology is disrupting industries – not a new concept but one that is currently happening at a faster pace and on a broader scale. Industry X.0 is causing companies to have to fundamentally change. For example, in the tire business, once a very low-tech industry, Irwin shared that Michelin is now managing tires for companies' fleets. Essentially, they are now selling a service versus a product. This has required them to fundamentally change their product to include technology (sensors) so they can monitor usage. Accenture believes that AI is becoming the key technology in transforming an ordinary product into what they call product X.0. They believe that in the future, digital will become 70% of the source of value in a product, up from approximately 10% today. Some industries are farther along with the integration of digital technology, but other industries such as industrial manufacturers are just beginning the journey.

Directors should be aware of and ask their companies: where are we in the journey as we need to start it now, knowing that the rotation to the "new" will be a deliberate and perpetual path, not a single event.

Workforce of the Future – Torin Monet, Senior Principal in Accenture Strategy's Talent & Organization practice

In the final module, we discussed how technological changes within corporations are also driving the need to change how we think about our human talent. It makes sense – as companies are modernizing, they are introducing new technologies across the front, middle and back office of the enterprise to be competitive. This means an increasing need for differentiated technical talent – and that talent is becoming scarce, so companies that can secure the scarce digital talent are more likely to win. According to an Accenture survey, 49% of professionals, the highest single response, see digital skills limitations as the constraint to applying digital technologies. And the values and priorities of the talent of the future have changed. Things like culture, work/life balance and employee experience play a larger part in a job decision. And, importantly, job candidates have access to how companies rank in these areas through websites like Glassdoor. Companies must be aware of their ratings and perception, and accept them as reality, if they want to secure the scarce talent.

What do directors need to know and ask of their management teams? Is the company creating an employee experience that unlocks the most human potential? Are we articulating an employee value proposition? Are we embracing life-long learning even at the leadership level?