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What Your Board Needs to Know About IT

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Information technology (IT) issues are increasingly important to businesses from strategic, size of investment, risk creation and mitigation, and operational perspectives. At Foley's sixth annual National Directors Institute on March 8, 2007 in Chicago, "What Your Board Needs to Know About IT" was a featured breakout designed to discuss these issues in detail. Moderated by Jim Kalyvas, partner and chair, Information & Outsourcing practice, Foley & Lardner, the panel also included Ken Porrello, principal, Deloitte Consulting LLP and Ellen Koplow, general counsel, TD Ameritrade.

This three-part presentation explored corporate board engagement with IT issues, including insights into boards' varying approaches to IT based upon their business models and strategies; the realities that can shape a board's agenda and how it affects oversight of IT; and best practice tips on how boards can improve their knowledge and handling of IT issues.

Information Technology and the Business: Overview of Boardroom Perspectives on IT

In the first section of the presentation, Ken Porrello presented an overview of how boards in general deal with technology issues and their potential leveraging as strategic resources. This presentation was based upon research performed by Deloitte, including Mr. Porrello's work with CEOs and other officers, and a joint survey conducted by Deloitte and *Corporate Board Member* magazine which received over 450 responses. (The results of the survey are available in the March/April 2007 issue of *Corporate Board Member* Magazine.)

The Progression of Information Technology as a Business Lever

Deloitte's interest in this area stemmed from a sense that boards had become more aware of, and more interested in, IT and its potential uses over time. Board awareness of IT has tended to increase over the past four decades.

- In the 1960's and 70's, IT was primarily seen by boards as a means to automate processes that had previously been done manually, with an emphasis on increasing efficiency. However, in the 1980's, the focus shifted from simply automating existing processes, to using technology to re-engineer and change the very structure of a business .

- The late 1990's saw a rise in popularity of enterprise resource planning systems (ERPs), which used computer software and hardware to integrate all data and processes of an organization into a unified system – in other words, technology was now being used to "wire together the organization," and board awareness of IT was thus heightened. Additional interest in IT stemmed from year 2000 concerns and financial reporting requirements.

- Finally, in recent years, IT has been used not only to connect the organization's units to each other, but also to connect to customers outside the organization.

Based on this progression, Deloitte suspected that awareness of IT was thus rippling into more board considerations and activities, and wanted to find out more.

The Role of Technology in the Business

In analyzing business approaches to technology, it is important to understand that technology means different things to different businesses, depending on how each business used IT and its strategic value to that business. For some businesses, technology will be more critical than for others. In the survey, businesses were categorized as Type 1, where technology was least critical, through Type 4, where it was most critical. Mr. Porrello noted that the size of the company did not dictate which type of business it was, and that plenty of smaller companies currently operated at a Type 4 level.

- Type 1 company: **IT supports the existing business**. In other words, technology is needed to help streamline and operate existing processes, but technology is not used to innovate the company or change the business. Therefore, a heavy investment in IT is not critical to the business. Many companies still operate in this manner. An example would be a real estate firm that uses a computer network to post, share and access listings; although IT is helpful to the business, IT does not change the basic business model or structure.

- Type 2 company: **IT supports a competitive advantage of the business**. Here, key parts of the business depend on timely and accurate information. An example of a Type 2 company might be one with an automated supply chain, where its competitors also have automated supply chains. A failure of the supply chain might cause the company to go out of business, since it would become unable to compete. Therefore, IT is a high-stakes investment for the company.

- Type 3 company: **IT does not just support the competitive advantage, it provides that advantage.** IT is the competitive differentiator between companies in this arena, and timely, accurate information is often critical to the business strategy. An example would be a global express delivery service or an online retailer. In these business areas, the company with the best technology has the advantage over the competition.

- Type 4 company: **IT actually *is* the business**, as with a provider of fund transfer engines or other important software. IT is explicit in the value proposition, and business and IT strategies are tightly integrated. IT is not only an agenda item for these businesses – it is the main agenda item.

Board Approaches to IT Governance: Results of Deloitte Studies

Deloitte's research into board approaches to IT matters had three objectives: 1) investigate how the role of IT in a company affects the board's approach to IT matters; 2) document practices adopted by management and boards for governing IT; and 3) develop recommendations for how the board and management can better govern IT.

The research revealed four levels of board involvement with IT, ranging from Level I, where the board had little to no involvement with IT strategy, through Level IV, where the board

had dedicated technology expertise and continual involvement with IT knowledge and management.

- At Level I — Ad Hoc Engagement — the board had little to no involvement in any aspect of IT strategy, value or risk assessment. The board was involved occasionally in a review of major capital IT investments, such as an annual audit. Even with the increasing importance of IT to businesses generally, approximately 20% of companies surveyed still fell into this category.

- At Level II — Awareness — the board reviewed IT matters on a regular basis, interacted regularly with IT management, and guided major IT investments. Approximately 40% of companies surveyed, the largest group, fell into this category.

- At Level III — Frequent Engagement — the board reviewed IT matters frequently and closely scrutinized IT alignment, risk and value-related issues. These boards not only interacted frequently with several levels of IT management, but often included dedicated committees on IT matters. Approximately 30% of companies surveyed fell into this category.

- At Level IV — Continual and Deep Engagement — the board included multiple IT experts as well as having a dedicated technology committee; interacted continually with IT management; and was intimate with IT alignment, risk and value-related issues. This level of involvement was typical of Type 4 companies, where the technology essentially was the business. Only approximately 10% of companies surveyed fell into this category.

One might expect, based on these results, that the type of business would match the level of involvement. In other words, a Type 4 business, where the technology essentially is the business, would be likely to have the highest level of board engagement, as was shown by the survey. Conversely, a Type I business, where technology is helpful but not strategically critical, might be expected to have a Level I board engagement, where the board reviewed IT matters only occasionally.

However, the survey showed, somewhat surprisingly, that a number of Type 2 and Type 3 companies were actually operating at engagement Level I as well. Although IT initiatives were strategically important to strategically critical for these businesses, their boards had little involvement with IT and only reviewed IT matters on an ad hoc or annual basis. This lower, and possibly inadequate, level of IT involvement was sometimes caused by the personality and interests of the CEO, where the board wished to be more involved with IT but the CEO directed its focus elsewhere . In some cases, the history and culture of the particular board caused it to pay less attention to IT, despite the CEO's efforts to focus the board in that direction. One CEO surveyed noted that the current members of his board lacked interest in technology, a problem he hoped to remedy by obtaining more interested members through the turnover process.

Overall, the study suggested that boards in general needed to look more closely at IT issues given IT's major impact on risk and capital investments for most businesses.

Board Foundations for IT Governance: A Model for Progression of Board Involvement in IT

Four "foundations" for board involvement in IT have emerged from research, including:

- **Board Structure:** the use of committee structure to enhance or demote the importance of, and focus upon, IT

- **Allocation of Board Time:** the frequency of IT as an agenda item and breadth and depth of board briefings on IT

- **Board Composition:** the presence or lack of board members with IT experience and knowledge

- **Board Interactions with IT Management:** the frequency and intensity of participation of IT management, both in formal board meetings and in outside activities such as dinners, consultations, ad hoc briefings, etc.

Changes in the areas of these specific foundations could increase or decrease a board's level of engagement with IT. For example, one CEO surveyed had his chief information officer (CIO) make a presentation at every board meeting, even if only for a short time such as fifteen minutes. The CEO did this so that when the board needed to focus on an important IT issue involving a large capital expenditure, the board had some knowledge of the topic and the team involved, and the issue did not just "come out of left field." This type of activity could be classified under the foundations of Allocation of Board Time to IT and Board Interactions with IT Management. A general model was developed showing each foundation's correspondence to the overall levels of board engagement with IT.

- At Level I — Ad Hoc Engagement — the board structure has no formal recognition of board responsibility for technology oversight. IT has limited time on the board agenda and is often relegated to a board meeting topic. The board members have limited, if any, technology knowledge, and board interactions with IT management, such as the CIO, are limited.

- At Level II — Awareness — oversight of technology is delegated to an audit committee. IT is a semi-annual or annual discussion topic that becomes more frequent during heavy investment periods. Board members still have limited if any technology knowledge, and interact only at the CIO level, with limited visibility into the IT team.

- At Level III — Frequent Engagement — technology policy and strategy are often directed by the board, which might also include a technology committee. IT is an agenda item at every board meeting, and the board frequently reviews strategic IT initiatives. The board includes one or more technology-savvy directors and may have an informal IT advisory board. The CIO attends all board meetings and has frequent ad hoc contact with the board. Senior IT management is also included in the succession plan.

- Finally, at Level IV — Continual and Deep Engagement — technology policy and strategy are directed at the board level. The board has a dedicated technology committee. IT is an agenda item at every board meeting and is frequently reviewed. The board has multiple technology-savvy directors and IT advisors from

industry and academia. The CIO attends all board meetings and the board frequently interacts with not only the CIO, but IT management, who are visible to the board and included in the succession plan.

Conclusions of Deloitte Study

The Deloitte study concluded that significant opportunities exist for senior management and boards to improve their approach to addressing IT, without having to disrupt the normal operations of the board or its agenda to do so. In general, there is a high disparity in how much attention boards pay to IT issues, and dramatic variation in boards' readiness to engage on IT governance matters. These variations are not consistently explained by the role of IT in the business and its importance to strategy for that specific business . Boards can improve their engagement with IT by changing their approach to foundations in order to bring the board's level of engagement in line with IT's role in the business.

Overall, as Jim Kalyvas observed, the Deloitte study gives a sense that "one size does not fit all" when it comes to IT governance. Businesses have different needs for IT governance, and boards should adapt to meet those needs.

Realities of Today's Boardroom: Board Oversight of IT

In light of the Deloitte study, which provided a general model for board IT governance, Ellen Koplow gave her impressions of how IT governance is handled in the "real world" of the boardroom. Even for a company such as TD Ameritrade, that is extremely involved with IT on an ongoing basis, the extent to which IT is a board priority can vary. The current business strategy and other business activities can affect what IT issues should be placed before the board, and when such agenda items are appropriate for the board or most likely to be of interest to the board.

Balancing the Priorities of the Board

Although IT is important, perhaps even critical, to the operation of a business, in reality a board has many priorities and IT must be balanced with the other issues on the board's agenda. Ms. Koplow listed several ways in which IT-related issues can be effectively brought before a board in a manner that would allow the board to work most productively.

- First, it is important to educate a board about IT in the enterprise before an IT issue arises. The board must be made aware of what technology means to the company, so that it can be equipped with the knowledge to make good decisions. Therefore, appropriate background information must be placed before the board during board orientation, as well as on an ongoing basis.

- Second, IT issues can be placed on the board's agenda in response to specific triggers. These triggers might include an event or project, such as outsourcing or ERP initiatives; a compliance issue, such as disaster recovery or data security; or a risk issue, such as improving core system stability. A triggering event raises the priority of IT for the board.

- Third, board discussion of IT issues, and the priority of these issues, can be shaped by changing the way in which the board receives information. For example,

whether an IT issue is handled by an audit committee, whether that committee decides to bring the issue before the general board, or whether the issue is initially brought before the full board is in large part determined by the urgency or importance of the issue. Similarly, involving the board in leadership of an IT issue will create a higher priority than if the issue is handled by IT management.

Understanding Your Board's Oversight of IT

Ms. Koplow noted that TD Ameritrade is heavily involved with technology by being a public company that provides financial services over the Internet. Therefore, technology is always very important to the business. However, the realities of board priorities mean that at different times, the board might operate at different levels of engagement ranging from Level II through Level IV, depending on the current business environment and what other items are on the board's agenda. The board's level of oversight of IT therefore changes from time to time, and it is important to understand the factors that may affect the level of oversight.

Competing priorities for the board's time, and the current strategic value of IT to the company, can be major factors affecting the level of oversight. As an example, when TD Ameritrade was discussing a major purchase of another company, the board would not have been interested in IT as a regular agenda item and would have resisted attempts to discuss it. However, after the purchase was finalized, integration of the technologies of the two companies became strategically important. At that point, this IT issue of merging technology became a major board priority and was placed on the board's agenda at every meeting. An awareness of these types of priorities is helpful in determining which issues to place before the board and when it is important to utilize the board's oversight.

Legal and regulatory requirements associated with IT issues, such as data privacy and HIPAA, also affect a board's oversight obligations regarding IT. Here, most boards simply want to know if the company is in compliance with applicable rules and regulations. If they are told "yes," then they may not believe it is necessary to inquire further into how the technology actually works. However, some depth of knowledge may be advisable, and if there is any question on the ability of a company to meet its obligations that rely upon IT for compliance, the board may need some technically skilled advisors to address this in such cases .

Technology literacy and the comfort level of the board and committees with technology, as well as the board and corporate culture, can also impact the board's approach to IT governance. Ms. Koplow stressed the importance of "knowing your board" in order to increase these comfort levels and bring issues before the board effectively, using the best vehicle at the appropriate time.

In most situations, boards address IT issues as a hybrid of a larger business issue, rather than as a separate agenda item. Again using the example of the corporate acquisition, the TD Ameritrade board understood that the company possessed the technology and skilled personnel to ensure a smooth transition and continue delivering services to clients over the Internet. However, in the extraordinary situation of a significant event, like an acquisition, the board needs to ask additional questions, not simply rely upon its prior understandings. The job of a general counsel is to bring potential risks to the attention of

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the board, but the board should also be equipped with the knowledge required to allow it to make informed inquiries on its own.

Common Types of "Triggers" For Placing IT on the Board's Agenda

A number of triggering events can operate to place an IT issue higher on the agenda of board priorities. These triggers include traditional triggers such as a crisis or event, as well as regulatory triggers and less obvious triggers related to the general impact of IT.

- **Traditional triggers** include those events and crises that generally raise the board's awareness of IT. Events include planned projects such as outsourcing initiatives or a core system replacement. Crises would include unusual occurrences such as a natural disaster that destroys a data center; Y2K; and even some competitive crises where the company must react quickly. For these crises, it is important to revisit the issue after the triggering event is over and plan for needed redundancy.

- **Regulatory triggers** include initiatives such as data protection and financial controls. The board must be aware of regulations requiring changes or expenditures in the IT arena, and be educated and equipped to ensure compliance and meet their fiduciary responsibilities.

- **Less obvious triggers** might include a focused assessment of IT components in key business initiatives, or the monitoring or questioning of the general impact of IT on operations or competitiveness. Boards should take a critical look at a company's IT systems from time to time to ensure that goals are being met and to assess whether improvements are necessary.

Ms. Koplow recommended that those who are tasked with placing issues before the board understand that the focus of the board and its committees should shift based on the relevant facts and circumstances involved with the company at any given time. Therefore, it is important to understand how certain triggering events may impact the company . It is also important to work towards improving technology literacy on boards and committees in advance of a triggering event, so the board is properly oriented and can appropriately address the trigger when it occurs. Finally, processes should be created that enable IT to be addressed in context, and more holistically, by the board, rather than as a series of singular "one-off" events apart from the general business and strategy picture of the entire company.

Bringing It Together: What You Can Do Differently Next Quarter

In the final section of the presentation, Jim Kalyvas discussed some practical steps for board's to take to improve their ability to understand and evaluate IT issues.

Determine the Board's Role. Assess both the state of the business and the role of IT in the business. It is important to realize that "one size does not fit all" and that companies have different goals and needs based on the state of the business and the role of IT in the business. Also, the emphasis of the board's role may need to shift between monitoring and advising, depending on the issue being addressed .

Have a Governance Plan. Boards should plan their approach to technology, rather than permitting IT to be addressed by default. The board should agree on an approach for the year, and follow it, by addressing such questions as: how often and in what context do we see the CIO?; how often and for what purpose should IT be on the agenda?; will certain issues be handled by the audit committee on an ongoing basis?

Short Term and Long Term Changes. While certain improvements to board practices with regard to IT may take some time, such as selecting board members that have expertise relevant to the acquisition, development, use, and management of technology in business; other effective changes can be implemented with little effort.

In particular, the manner in which the board considers certain high impact IT initiatives such as an outsourcing , Enterprise Resource Planning project, or systems replacement, can be dramatically changed simply by insuring that certain questions with regard to such initiatives are asked and answered.

Ask the right questions. Boards should be proactive in asking questions about technology initiatives . It is important for boards to recognize that any experienced business executive, not just individuals knowledgeable about technology, can ask penetrating questions about IT projects. Some key questions that are often overlooked include:

- What is the business objective this IT project is designed to meet? How is this technology going to further that objective?

- If this project is designed to produce a cost savings, what are the savings projections based upon? What are the underlying assumptions? What is the confidence level that the company will actually save this amount of money by implementing the technology?

- Regarding costs, what is the cost of the project? How is the cost calculated? What are the assumptions underlying this cost projection, and what is our confidence level in the projected cost?

- What are the savings and costs projections over time, i.e. beyond year one/ year two? The confidence in financial projections for many IT projects gets fairly soft in the out years of a project of multi year duration. The need for projections is likely essential, it is the quality of the projections and assumptions on which they are built that are important to test.

- What has management done to try and realize this IT objective or initiative? Has the board considered alternative technologies? Are there specific questions that management needs to answer for the board regarding this IT issue?

- Can the board develop a common framework to address issues like this in the future?

- Finally, the board should ask management, "How do you define success for this project?" Management should clearly define goals, milestones and other metrics, so that the board can later evaluate the project and see if expectations are being met. This approach avoids the common pitfall of authorizing a large technology

expenditure and then never being able to properly gauge results or determining whether the technology investment did what it was supposed to do.

For More Information

For more information on this session or the sixth annual National Directors Institute, visit Foley.com/ndi2007 or contact the panelists directly.

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