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Enterprise Risk Management and Technology

A lot has been said over the last two years about the role technology can play in Enterprise Risk Management (ERM). Much of the discussion has focused on very specific issues where technology plays a role in the ever-present Sarbanes Oxley compliance process (SOX). Often, the role of technology is viewed simply as a platform to record and report on past financial transactions. For example, it is not uncommon to hear companies say that they are “SOX compliant” or their “technology supports SOX,” where what is meant is that their technology or software accurately reports the financial transactions relating to insurance policies or claim events.

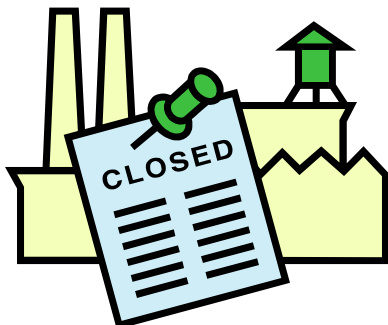
Without doubt, technology is a major component of the control element (the process, application, or activity that mitigates a loss or risk) of SOX compliance. This compliance includes testing that controls are in place, effective, and working to accurately record financial transactions. However, this control element relates primarily to section S404 of SOX.

Section S409 of SOX requires an entity to report on the impact of any event that could have a material impact on the finances and operations of the entity within 96 hours. This means that not only must there be a process in place to report on the financial impact of a major event such as a fire, natural catastrophe, or similar major event; but there must also be a process to report on how the operations of the entity could be materially impacted by the event.

Unexpected Financial and Operational Impact

Most organizations have established systems that can report on the financial impact of the loss of a major customer or supplier, but how many are able to go beyond these basics to report on the expected financial impact of a whole range of operational losses beyond the usual?

Consider this scenario: A supplier of key components is located in an industrial complex in Slovakia. The supplier uses an energy intensive process and has taken advantage of relatively low-cost electricity in the region. They have established themselves as the primary supplier to the world market, forcing potential competitors to cease operations through intense competitive bidding.



A major windstorm sweeps across Europe, destroying electricity production and transmission lines over a wide area. Flooding in the facility and neighboring area causes the supplier to lose key staff during the storm. Production will take 3-6 months to recover. Because of the high cost of the product, the customers of this supplier kept minimal stocks, relying on a just-in-time production strategy.

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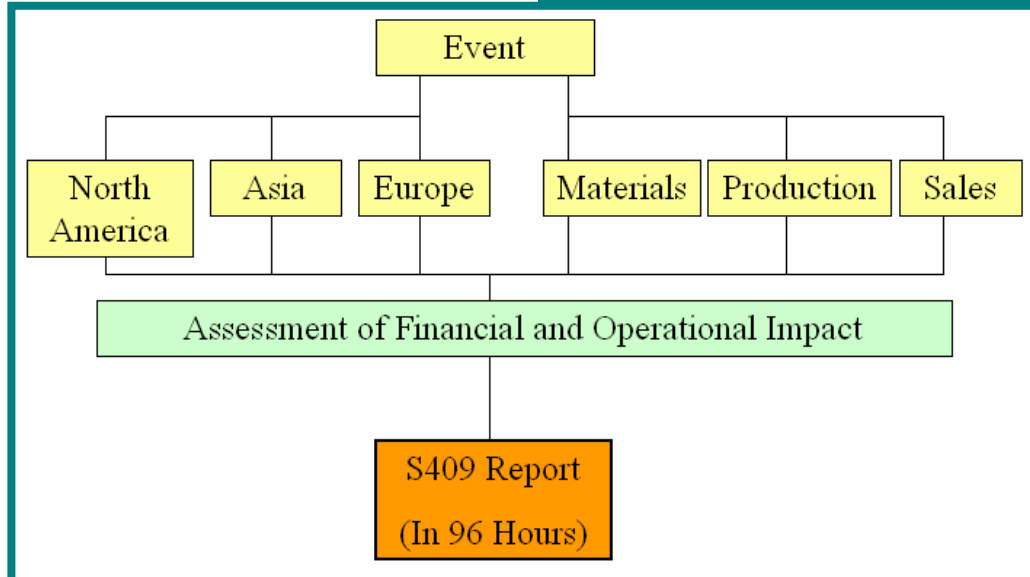
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The scenario raises many questions for customers trying to comply with SOX section S409. Will they know the extent of the loss? Will they know within 96 hours how badly they will be impacted, both from a financial perspective and from an operational perspective?

The financial consequences may be offset to some extent by insurance, but is the coverage really going to be that effective given the extent of losses across the region? How are the operational losses estimated? It is unlikely that many companies have the necessary information available to them to accurately and quickly report on this type of event, despite the requirements of section S409.



Taking an ERM Approach

The new COSO ERM framework goes a long way towards providing a context for this information to be gathered and reported, but few systems are designed with this view in mind. An ERM approach would require the risks of the entity to be viewed from the perspective of processes, objectives, accounts (i.e., General Ledger), and areas (i.e., HR, production, etc). From these viewpoints, risks could be viewed and assessed to determine the extent to which the controls in place would mitigate any event.

The problem is that this multi-faceted connection is typically not made. From the accounts (or financial) perspective, there is usually little forward-looking data. This is understandable, as the intent is to provide a clear and accurate financial record of what has happened. From the process perspective, the current technology is generally focused on recording historic transactions. Attention has not been paid to automating the expected impact of future events, let alone being able to translate these projected events into SEC reportable data. From the area and objectives perspectives, the connections generally are not made.

Current systems often suffer from the need to achieve very specific outcomes, such as calculate past revenues and expenses, calculate margins, and possibly assist in running today's operations. The challenge to technology in today's environment is to not only maintain this high level of activity in looking backwards, but to also provide a more effective way of looking forward and producing credible estimates of what will result from known events.

Technology will become increasingly important in providing this bi-directional view of the business world. Although historic data will still need to be highly accurate and responsive, interfaces will have to be developed to project how the information may look if certain events happen. The whole ERM process is geared "to provide reasonable assurance regarding the achievement of entity objectives" within the COSO ERM framework. The challenge for technology is to translate this vision into practical systems that serve both the historical financial reporting requirements of SOX and also this forward-looking view of how risks could impact the entity's objectives.

For more information on Sarbanes-Oxley, COSO, and ERM, visit the following websites:

<http://www.sarbanes-oxley.com>

<http://www.coso.org>

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