

Regulatory Compliance and Information Technology
EDUCAUSE Evolving Technologies Committee
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Introduction:

University regulatory compliance and its relationship to emerging technology can be viewed much in the same way as a cosmologist observes dark matter in context to the Universe. Astrophysicists observe that dark matter accounts for the vast majority of mass in the universe. Dark matter's inferred presence is based on its gravitational effects on visible matter. Outcomes are therefore observed as the effects of unseen actors.

Scientists are attempting to discover what dark matter is, how much there may be, and what effects it may have on the Universe. It is in much the same way that Information Technology organizations seek to quantify the impact of regulatory evolution, and anticipate the proliferation of regulations, laws, and mandates that impact the organization, all while trying to achieve sustained compliance by optimizing the value they receive from good data management, attention to service, and security operations.

To further complicate the organization challenges surrounding compliance and emerging technology, Universities are complex environmental systems which continually change due to organizational actors shifting in and out of the environment, creating difficulties for vertical, horizontal, formal, and informal norm diffusionⁱ (Montgomery, 2005). According to Gasser and Haueusermann (2007), compliance generally indicates the observance of norms on the part of an organization.ⁱⁱ Institutions must institute formal norms that comply with federal and state regulatory agencies, but must also deal with institutional policies and norms. All of these factors exert influence on the collection and use of data within the institution, including, but not limited to, employee and student information, financial data, information concerning individuals participating in university health services, and university research operations.

A primary source for formal institutional norm establishment is the Code of Federal Regulations. The Code of Federal Regulations (CFR) is the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. Applying these regulations to mature technology is itself a daunting task. Anticipating the regulatory exposure in the context of emerging technologies makes the task even more challenging.

Changes in Compliance Management

Traditionally, University compliance objectives focused on mimicking the rules enforced by governmental agencies, and avoidance of severe penalties for noncompliance with the rules. How and where data entered the system, as well as its authenticity was perhaps not a primary concern; the thrust of compliance in terms of data was report writing. However, the next generation of socially interactive applications significantly expands both the possibilities and the risk factors associated with data management and services. Is the data authentic? Are those involved in data input involved at a proper "role" level? Is data, once in the system, being managed effectively? . As technology matures, and we see more virtual world tools, these questions and others are critical in order for compliance objectives to keep pace with innovation. Additionally, ongoing change itself is a vital variable in compliant data management and innovation. Preserving good compliance goals will require organizational evolution. Yet, change has a considerable psychological impact on the human mind. To the fearful it is threatening because it means that things may get worse. To the hopeful it is encouraging because things may get better. To the confident it is inspiring because the challenge exists to make things better (King, Whitney jr). It is imperative that organizations find ways to manage

change effectively to reduce any negative effects that the variable of change itself can have within the organization. Likewise, compliance initiatives may create the environment by which IT improvements are forged through adopting best practices and working to achieve transparency in IT developments.

What are some of the key questions to ask about Regulatory Compliance?

How do we achieve actionable intelligence to prepare for regulatory impacts, and embrace change while strengthening the IT organization? Establishing uniform standards and practices for change management across an enterprise and codifying best practices are two important methodologies. Measuring success in relation to other institutions and/or organizations can also help establish benchmarks for success. . Business process and key control documentation is also a powerful tool that can be used to model, analyze, and facilitate necessary changes. Standardized business processes and activities improve the efficiency of and also support successful reorganizations based in necessary changes, as well as create a central source for employee training. However, it is also important to ensure flexibility, as day-to-day operational improvements are critical in supporting a sustainable compliance framework.

Body:

What are the implementation challenges? How does Regulatory Compliance impact IT?

IT organizations are already stretched thin in terms of resources. A significant portion of the IT operating budget is consumed with maintaining complex infrastructure and software environments. It is in this environment that IT organizations seek to leverage existing resources and invest in resources that provide a return on investment while maximizing the fulfillment of compliance requirements.

Regulatory compliance is best addressed in a three point approach using an iterative process. Define the compliance situation and assess risk. Apply proper control measures (fixing the gap) and follow up with Governance (eliminate the root cause of the failure).

What are the likely impacts of Regulatory Compliance in the coming one-to-three years?

All University employees will play an important role in securing data that resides in the care of the institution. As Web 2.0 application mature, universities will be faced with the challenge of certifying the adequacy of systems or the adherence to regulatory goals. This challenge will require a unique expertise and different interactions with regulatory agencies. And, this new interaction will require an organizational, transformation.

What are the related Higher Education projects?

Not addressed

Closing:

What are the consequences of implementing the Regulatory Compliance?

How should we proceed?

Information technology professionals have the responsibility to understand their critical roles in ensuring

compliance through good technology systems and excellent data management. If IT professionals resist their role as facilitator in these processes, the risk of sanctions and monetary fines increase exponentially. IT professionals must find ways to work closely with the regulatory experts within their organizations to ensure robust institutional systems based in knowledge of regulatory concerns.

ⁱ Montgomery K. (2005). Historical Shifts in Norms of Research Conduct: How Public and Private Organizations Create and Change Logics of Research Integrity. Montgomery, K. (2005). Historical Shifts in Norms of Research Conduct: How Public and Private Organizations Create and Change Logics of Research Integrity. Unpublished paper presented at the annual meeting of the American Sociological Association (1994). Updated version used by permission, June 25, 2005.

ⁱⁱ Gasser, Urs and Haueusermann, Daniel M., “E-Compliance: Towards a Roadmap for Effective Risk Management” (March 15, 2007).