

MIS 3534 Spring 2015 – Strategic Management of Information Technology *Week 7 – IT Governance*

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Certifications for MIS majors

- Certified Information Systems Auditor (CISA)
- Certified Information Security Manager (CISM)
- Project Management Professional (PMP)
- Oracle Certified Professional (OCP)
- SAP Certified Associate/Professional
- Cisco Certified Associate/Professional

Today, we will discuss ...

- What is IT governance?
- What's the role of board of directors in IT governance?
- What's the role of business managers in IT governance?

Board of Directors

- Who are a board of directors in a corporation?
- What do they do in general? What are their responsibilities?
- Why do business firms need a board of directors?



http://jichs.ccsdschools.com/j_i_c_h_s_board_of_directors

Corporate Governance 101 (1/2)



Shareholders



Board of Directors



Management



Business Firm

<http://www.copters.com/trips/rhc2006.html>
<http://thomasmoreinstitute.wordpress.com/2012/05/04/shareholder-action-a-positive-development/>
<http://voguesecurity.net/content/board-directors>
<http://www.thunderbirdangelnetwork.org/angel-investor-phoenix-blog/bid/47461/How-Does-Your-Startup-Business-Management-Team-Measure-Up/index.html>

Corporate Governance 101 (2/2)

- Most shareholders do not have time, knowledge, and expertise to run a large-scale business firm.
- The number of shareholders is large (up to tens of thousands). They are not able to run the firm together.
- Thus, they hire a professional management team to operate the firm.
- Shareholder also appoint a board of independent directors to oversee and supervise the management team.

Separation of Governance and Management

- What does it mean?
- What are the interests of shareholders?
- What are the interests of CEO and senior management?
- Are the shareholders and the management in the same boat?
 - Sometimes, but not always
 - Were they in Enron, WorldCom, or Lehman Brothers? No.

Conflicts of Interests in Governance (1/2)

- Shareholders' interests : continued and sustainable generation of profits and long-term values
- Management's interests
 - Maximize market shares, revenues, or short-term profits
 - Expanding business portfolios (by taking too much risks)
 - Managing their power and influences
 - Keeping and raising their salaries or stock options
- Shareholders and Management are not in the same boat.

Conflicts of Interests in Governance (2/2)

- Conflicts of Interests : The management’s interests are not always congruent with the shareholders’.
 - For example, pursuing growth in market share and revenues does not necessarily lead to profit growth.
- Information Asymmetry : The shareholders, with limited knowledge and expertise, cannot accurately monitor what the management does.
- Therefore, the management needs “adult supervision” by the board of directors, on behalf of the shareholders.

Duties of Board of Directors

- Representing the best interests of shareholders
- Audit and control of the firm's finance and accounting
- Appointment and supervision of senior management team
- Approving major investment or business decisions such as M&A, entering to new business, or divesture of existing business
- Determining compensation of senior management team
- Making sure that the firm meet all regulatory and legal requirements
- Offering consultation and advices to the management team
- Ensuring continuation and proper operation of the firm

CIO Going Rogue?

- What would happen if a CIO or IT managers receive no adult supervision or control? What if he can handle IT in any way he wants?
- What if the CIO pursues his own private interests, not the shareholders' interests?
- From Chapter 1, *"IT department is positioned to understand how the business works better than any other department."* (p. 11)
 - meaning that the CIO is in a powerful position to abuse the firm's resources for his self-interests and undermine shareholder value.

Missed Alarms and 40 Million Stolen Credit

Cybersecurity

Card Numbers: Home Depot Hacked After Months of Security Warnings

By Michael Riley, Ben Elgin, Dune Lawrence

By Ben Elgin, Michael Riley, and Dune Lawrence | September 18, 2014



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<http://www.businessweek.com/articles/2014-03-13/target-missed-alarms-in-epic-hack-of-credit-card-data>

<http://www.businessweek.com/articles/2014-09-18/home-depot-hacked-wide-open>

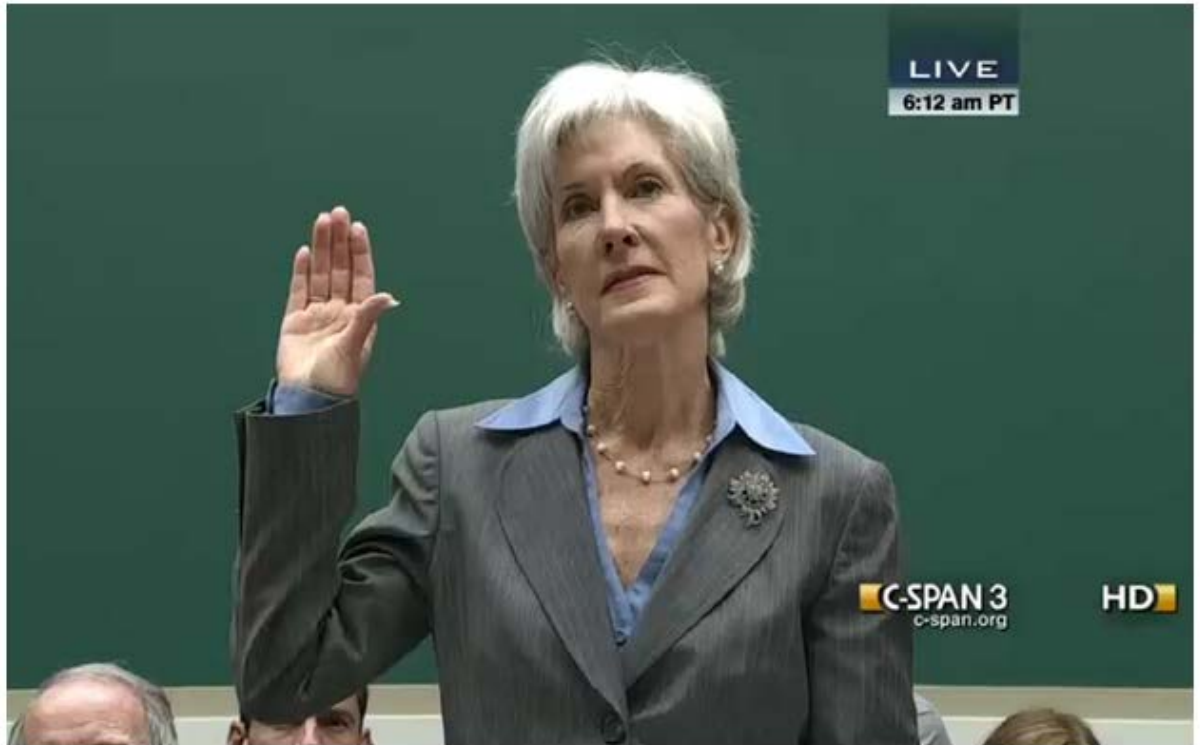
Obama administration knew of key Obamacare delay in August, emails say

By Tom Ivers OCT 30, 2013 9:42AM ET

Hous adm tied to **Sebelius: I Didn't Know Contractors Wanted to Delay Healthcare.gov**

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Without Proper Supervision and Controls ...

- A CIO might cover up security breaches or loss of intellectual properties, which might threaten the existence of the firm.
- The CIO might collude with the CEO and the CFO to make accounting frauds possible.
- The CIO might not report delays or failure of a major IT project, which would hinder the execution of major business strategies.
- The CIO might waste IT budget on projects that do not add value to the firm.
- The CIO might hire an IT vendor which is not capable but owned by his relatives or friends or offers him a bribe.
- The CIO might not do his best efforts to protect the firm's IT infrastructure and systems against accidents, natural disasters, or other risks.
- The CIO might fail to upgrade the IT system in response to technology developments.

Information Systems Auditor

- Source: <http://www.dcjobs.com/j/t-senior-information-systems-auditor-e-microstrategy-l-washington,-dc-jobs-j3150814.html>
- Job Description : conduct operational reviews of the IS function in relation to specific objectives established by Internal Audit management for the purposes of (a) assessing performance, (b) identifying opportunities for improvement, and (c) developing recommendations for improvement. The scope of these reviews may include all aspects of the IT function, from overall planning and organization to specific operating procedures, standards and policies. Collect, analyze, interpret, and document information as part of preparing complete, effective, and timely IT audit reports.
- Certified Information System Security Professional (CISSP) and Certified Information Systems Auditor (CISA) (both are preferred).

Mr. Barton's Presentation Before BoD (1/4)

- Why does Mr. Barton make a presentation in front of IVK Board of Directors?
 - If you were Mr. Barton and **not** required to attend, would you still want to present before the board?
- Four messages of Mr. Barton
 - IT management is too informal.
 - Under-investment in IT infrastructure
 - Little involvement of senior management in IT decisions
 - Strategic partnership between IT and business units

Mr. Barton's Presentation Before BoD (2/4)

- What is the objective of Mr. Barton? What does he want to accomplish?
- He wants to be *empowered* by a higher authority (board of directors), so that he can have a greater voice amongst the senior management team at IVK.
 - so that he could demand more funding in IT infrastructure and security.
 - so that he could institute a more standardized and coordinated enterprise architecture.
 - so that he could play a leadership role in IT management.

Mr. Barton's Presentation Before BoD (3/4)

- Mr. Barton was the last presenter at the board meeting.
- It implies to the management team that the IVK board of directors do not recognize IT as a core part of its business.
- If presentations before Mr. Barton's go overtime, he might not lose a chance to present.
- Not a great sign.

Mr. Barton's Presentation Before BoD (4/4)

- Some board members might say “We are so busy folks. One hour or one minute is a precious commodity for us. Why should we hear what he has to say?”
 - What would you tell them?
- If they say “why would you need more money for the infrastructure replacement project?”, how would you convince them?

How CIOs Can Raise Their Board Game

- Source: McKinsey on Business Technology (Fall 2012)
 1. Interact regularly with board members
 2. Set the agenda with the board proactively (proactively bring technology topics before the board.)
 3. Bring the right people to the board meetings (such as business unit partners)
 4. Leave the IT jargon behind
- The same guidelines apply when a CIO interacts with fellow executives.

The Duties of BoD for IT Management

- Representing the best interests of shareholders
- Audit and control of the firm's IT
- Appointment and supervision of senior management team (CIO)
- Approving major IT investment or decisions
- Determining compensation of senior management team (CIO)
- Making sure that the firm meet all regulatory and legal requirements related to IT
- Offering consultation and advices to the management team (CIO)
- Ensuring continuation and proper operation of IT

A recent Facebook post of a friend of mine

At the Genius Bar today, I asked to a "genius":

"I bought this computer 4 months ago but has problem. It keeps going to sleep every 30 secs. Resetting/rebooting do not work. What's the problem?"

He said:

"I have no idea. Let's reset it again. (after 30 seconds) "It looks fine now. If it happened again, please bring this one here again."

I said:

"The computer is almost new one. It's supposed to work well. I do not want to visit here and waste my time again. Please let me know the reason why it went wrong."

He said:

"Like I said, I do not know why. Maybe power supply problem but not sure. You know, nothing's perfect. I do not understand why you're upset."

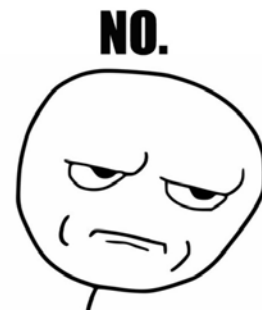
Think my own definition of "genius" (or Apple "care") has been wrong. I should've studied GRE harder.

Read a CIO Magazine Article

- CIOs Must Learn Politics of No
(<http://www.cio.com/article/2381060/>)

Why would IT be saying “no” to business? (1/3)

- Why would an IT manager say no to the request of Marketing to upload the customer data to the consulting firm’s server?
- At a company where everyone uses Blackberry, why would an IT manager deny the request to allow to use iPhone for work?
- Why would the request be denied to use a project management tool different from the one the company has been using?



Why would IT be saying “no” to business? (2/3)

- IT managers may have valid reasons to say no to business.
 - security concerns, inoperability with existing systems, and additional costs and complexity.
- They also may not want to bear greater work burden and responsibilities in case of failures.
- Business managers are unable to fire internal IT managers, providing IT with a less incentive to be responsive to business.
 - IT managers can become more “bureaucratic.”

Why would IT be saying “no” to business? (3/3)

- What would be one of the primary interests of typical managers including IT managers?
 - Not being fired
- What would happen if IT says no to business every time?
 - Business doesn't work.
- What would happen if IT says *yes* to business every time?
 - IT becomes too complex and chaotic.

IT-Business Partnership

- For success, IT and business have to become friends.
- If IT and business at Wyndham did not cooperate with each other,
 - would ByRequest have been possible to succeed?
 - What if IT was uncooperative?
 - What if business units were uncooperative?
 - No, no, and no



http://www.123rf.com/photo_10068580_image-of-businesspeople-hands-on-top-of-each-other-as-symbol-of-their-partnership.html

Read PepsiAmerica and Accenture Case

- PepsiAmerica

- Page 1-2 (before Addressing a Changing Market)
- Page 5-6 (Building an IT-Business Partnership)

- Accenture

- Page 11-12 (New IT Governance in Action)

IT Governance Mechanisms at VWoA

- ELT : Executive Leadership Team (top management group)
- ITSC : IT Steering Committee (senior business and IT representatives)
- DBC : Digital Business Council, made of reps from eBusiness teams(IT groups in business subunits)
- BPTO : Business Process, Technology, and Organization (Central IT group at Volkswagen of America)
 - PMO : Program Management Office (a subgroup of BPTO)

Business Involvement in IT Governance (1/2)

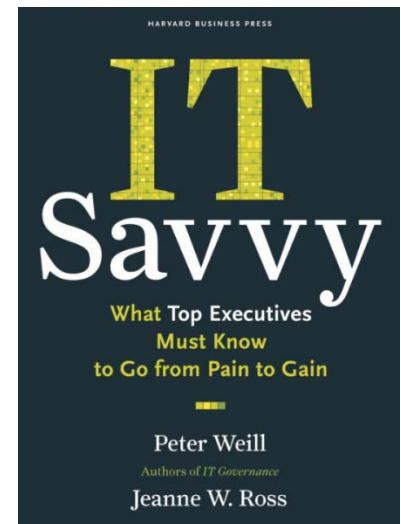
- Unlike PepsiAmericas and WVoA, there have been few formal processes and accountability in IT management at IVK, only ad-hoc decision-making processes.
- “He wanted the responsibility for such trade-offs (risks and costs) to be borne jointly by the business units and the IT department, not just left to the techies.” (p. 143)
 - He wants to solve the “one-neck-in-the-noose” problem.
 - The “one-neck-in-the-noose” causes IT to be less responsive and more bureaucratic.

Business Involvement in IT Governance (2/2)

- Why does Mr. Barton want the business units to take part of the responsibilities?
 - He wants to resolve the “one neck in the noose” problem. If something goes wrong with IT (which always happens), IT and business units need to share risks.
 - Many major IT projects fail not because of tech, but because of humans. Without risk sharing, business units would blame IT for a failure.

IT Governance Mechanisms

- Source: Weill and Ross “*IT Savvy*” (Harvard Business Press, p. 104-107)
- *IT Executive Committee* – CEO, CIO, and senior business unit managers
- *IT Leadership Team* – CIO and IT managers in business units
- *Business-IT Relationship/Liaison Group*
- *IT Projects/Service Oversight Committee*
- *IT Performance/Value Evaluation Committee*



Five Key Decisions IT Governance

- Source: Weill and Ross “*IT Savvy*” (Harvard Business Press, p. 91-92)
- *IT Principles* – how IT supports competitive strategies
- *Enterprise Architecture* – how to coordinate IT across business units
- *IT Infrastructure* – How to manage and support shared IT resources
- *Business Needs and Project Deliverables*
- *IT Investment and Prioritization*

IT Governance at Southwest Airlines

Accountable party	DECISION				
	IT principles	Enterprise architecture	IT infrastructure strategies	Business need and project deliverables	IT investment
CEO	Accountable				
CIO		Accountable for technology standards	Accountable	Leads tollgate reviews	
Executive committee ^a					Accountable for enterprise priorities
Strategy teams ^b		Accountable for process and data standards			Accountable for team's priorities
Business leaders				Accountable	
Architecture working group ^c		Conducts compliance reviews			

Source: Researcher interpretation of Southwest's governance design.

a. includes CEO and CIO

b. includes business leaders

c. reports to CIO

IT Governance at Accenture

	Key Decision Areas	Capital Committee	COO	ITSC	CIO	Business Sponsors
Strategy and Structure	IT Strategy (including policy formation, Strategic Scorecard, etc.)	I	C	A	R	C (their portion)
	Enterprise Architecture (including IT standards)	–	C	A	R	C (their portion)
	IT Organization	–	A	C	R	–
Multi-Year Planning	IT Initiatives (categories & budgets)	A	C	C	R	R (their init.)
	IT Product & Service Plan (incl. Global / Local accountability)	–	C	A	R	C (their portion)
	IT Strategic Sourcing Plan	–	C (exception)	C	A/R	C
Annual Planning	FY IT Priorities	–	C	C	A/R	I
	FY IT Initiative Plan	–	C	A	R	R
	FY IT Operating Plan	–	A	C	R	C (their portion)
	FY IT Capital Plan	–	A	I	R	C (their portion)
Execution	Variances, Changes, Issues— Performance Targets and Plans	–	C (> \$10m)	A (> \$1m)	R	C (operating) R (initiative)
	Benefits Realization	I	A (overall)	I	R	A (initiative)/R

A = Accountable R = Responsible C = Consulted/Participated I = Informed

Kellogg Business school Case – “Strategic IT Transformation at Accenture”

IT Governance and IT-Business Partnership

- The formal IT governance mechanisms (committees, processes) can *facilitate* and *institute* IT-business partnership
 - By regularly engaging at committees and meetings with each other, IT and business can become friends.
 - There were no such occasions at IVK before Mr. Barton.



Key Quotes from PepsiAmericas

Our partnership with IT has probably been the biggest change for us as an organization. We truly are partnering in a proactive, not reactive, way. There is an IT representative at my staff meetings, and our people go to the IT staff meetings, to make sure that we're in sync and working together... I think we recognize that as business leads, we are dependent on this collaboration. IT is not just this support department off to the side. They have to be part of our strategy as we move forward.

—Rich Frey
VP, Sales Operations

We're partners. And we work very well together. I think you need that type of partnership for success. So, they're working on the processes and we're working on the technologies, but we flip back and forth. I mean, we're constantly recommending process changes, and if the technology is not working the way it needs to work, they're constantly collaborating on that.

—John Kreul

Next Week

- Enterprise Architecture
- Read the IT Adventure Chapter 16 and write a brief of up to 200 words by 5:30pm next Monday.