

MIS 3534 Fall 2016 – Strategic Management of Information Technology *Week 1 – Introduction*

Min-Seok Pang

**Management Information Systems
Fox School of Business, Temple University
minspang@temple.edu**

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CIO?

- How would you explain about the job description of a chief information officer (CIO)? What does he or she do?
- Why does a company need a CIO?
- What kind of person do you think a CIO would be?



<http://www.theofficedealer.com/OSPECH89181EC6-WorkSmart-ECH89181EC6-Executive-Chair.html>

United States CIO and CTO

- Having seen the video of U.S. CIO and CTO, what kind of person are Mr. VanRoekel and Mr. Park?
- Did they say any technical jargons that you don't understand? What kind of language do they use?
- What kind of leaders are they?

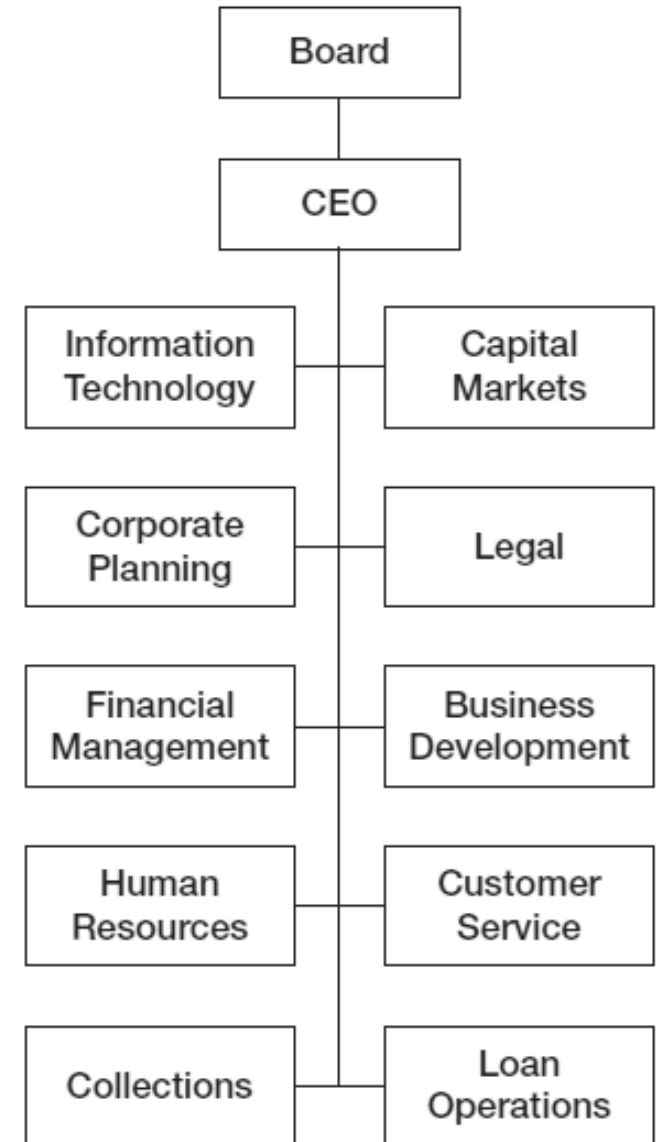


<http://www.fastcompany.com/1790016/inspired-facebook-nation-obamas-chief-disruptor-brings-startup-culture-govt>
<http://www.healthevolutionpartners.com/speakers/todd-park-chief-technology-officer-hhs.html>

IVK Corporation (1/4)

- In what kind of industry is IVK?
- How important is IT at IVK? Can IVK function without IT?
 - IVK cannot do its business without IT. It's mission-critical.
 - It has a substantial amount of customer and financial information that cannot be breached.

IVK corporation
innovating business solutions
www.ivk.com

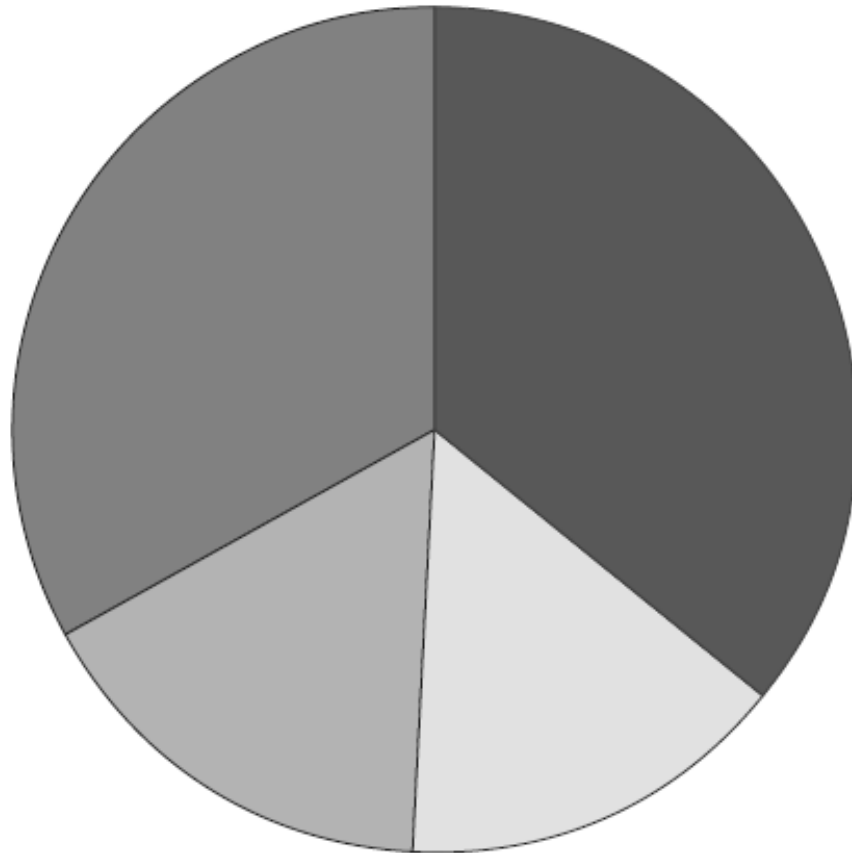


IVK Corporation (2/4)

- What is the current situation that IVK is at?

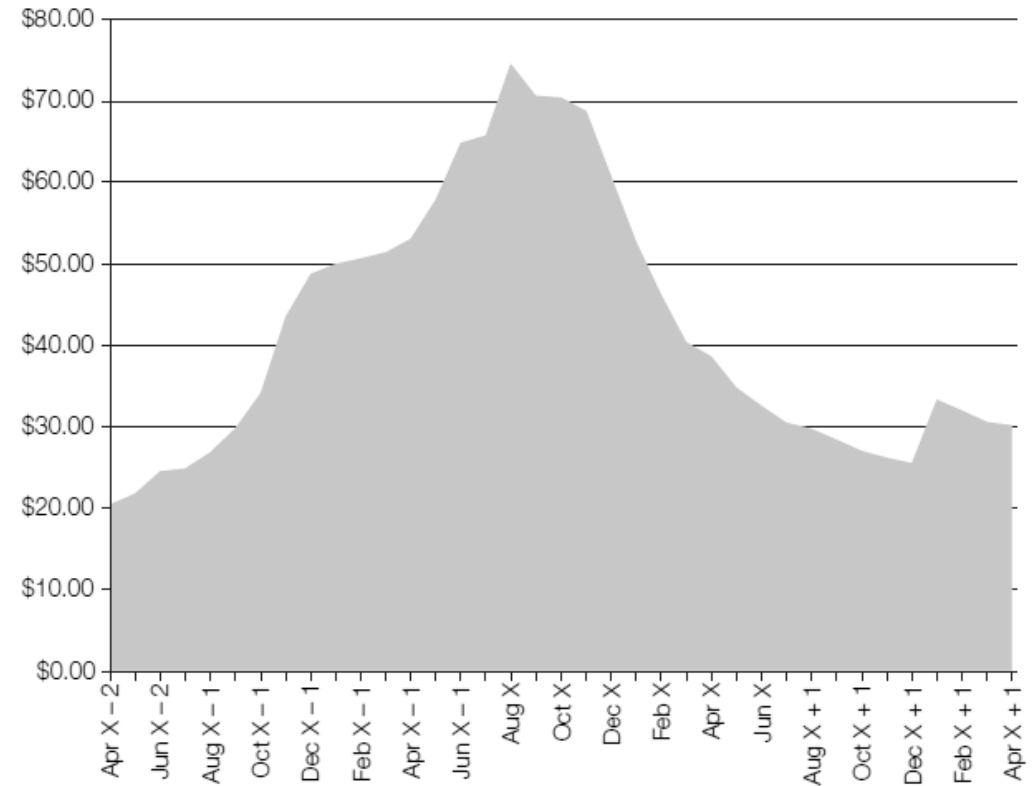
	Years ended June 30		
	Year X	Year X-1	Year X-2
Service revenue:			
Advisory fees	\$89,194,767	\$69,346,698	\$14,761,226
Residuals	74,894,813	61,027,105	11,834,993
Administrative and other fees	4,113,746	2,814,617	474,888
Processing fees	65,456,570	39,566,486	14,191,953
Total service revenue	\$233,659,896	\$172,754,906	\$41,263,060
Operating expenses:			
Compensation and benefits	54,879,252	26,805,902	11,488,553
General and administrative expenses	65,695,724	31,062,928	10,651,614
Total operating expenses	120,574,976	57,868,830	22,140,167
Income from operations	113,084,920	114,886,076	19,122,893
Other expense:			
Interest expense	717,392	1,563,305	1,824,493
Interest income	-814,894	-116,983	-91,220
Other income	-2,412	-2,200	-130,447
Total other expense, net	-99,914	1,444,122	1,602,826
Income before income tax expense	113,184,834	113,441,954	17,520,067
Income tax expense	43,539,727	42,214,388	5,106,933
Net income	69,645,107	71,227,566	12,413,134

IVK Corporation (3/4)



Competitor A: 36%
 IVK: 16%
 Competitor B: 15%
 Other: 33%

Stock Price for IVK Corporation



● Who is Mr. Carl Williams? Why does he become the CEO?

IVK Corporation (4/4)

- IVK has been experiencing an exponential revenue growth for the last two years, but it incurred a more increasing amount of expenses, according to its income statement.
 - Thus, profitability has worsened.
- IVK is a unstable second player in the industry, which is quite fragmented.
- These are why its stock price has stumbled significantly.
- Carl Williams was brought to this company as a fixer who is mandated to turn around its fortune and to improve profitability and market value.

Mr. Jim Barton, the New CIO of IVK

- If you were Mr. Jim Barton, would you take the CIO offer from Mr. Williams?
- Who is Mr. Barton?
- Why do you think the board of directors chose him?



Mr. Bill Davies (1/2)

- Who is Bill Davies?
- Why was he fired? What was wrong with him?
- Why did Mr. Davies warn Mr. Barton that he will not last more than a year? Do you agree?

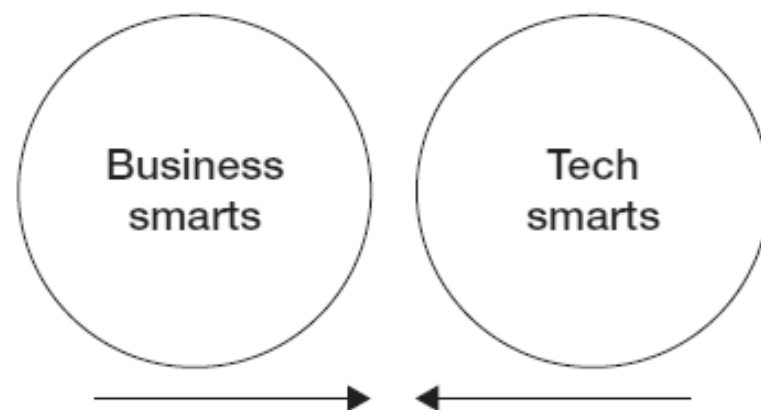


Mr. Bill Davies (2/2)

- He is a capable technical manager respected by his subordinates in the IT group.
- However, he was not considered part of top management team. For example, he wanted to be present at a meeting with customers, which was denied by his fellow executives.
- He was a “benevolent dictator” who was the only one who controls and knows about IVK’s IT.
 - He was inflexible and unresponsive to business needs.
 - The risk is that when things don’t go well (e.g. security failures), the dictator takes all the responsibility and no one protects or defends him.

CIO with Technical or Business Background?

- Should a CIO be chosen among technically-trained managers or business-background managers?
- Which skill is easier to learn? IT or Management?



Issues with Business/IT Knowledge

- IT knowledge
 - It quickly become obsolete. Technologies change so quickly that knowledge learned at a classroom may become useless in a decade or less. It requires *constant* learning.
- Business knowledge
 - Some knowledge/skill (such as leadership or negotiation) is hard to learn at classroom. It takes actual experiences.
- The point is that it is hard to master both areas. There are only a few people who do so.

IT management is about management (1/2)

- What does it mean by “*IT management is about management*” (p. 10)?
- What does it mean by “*IT department is positioned to understand how the business works better than any other department*” (p. 11)?

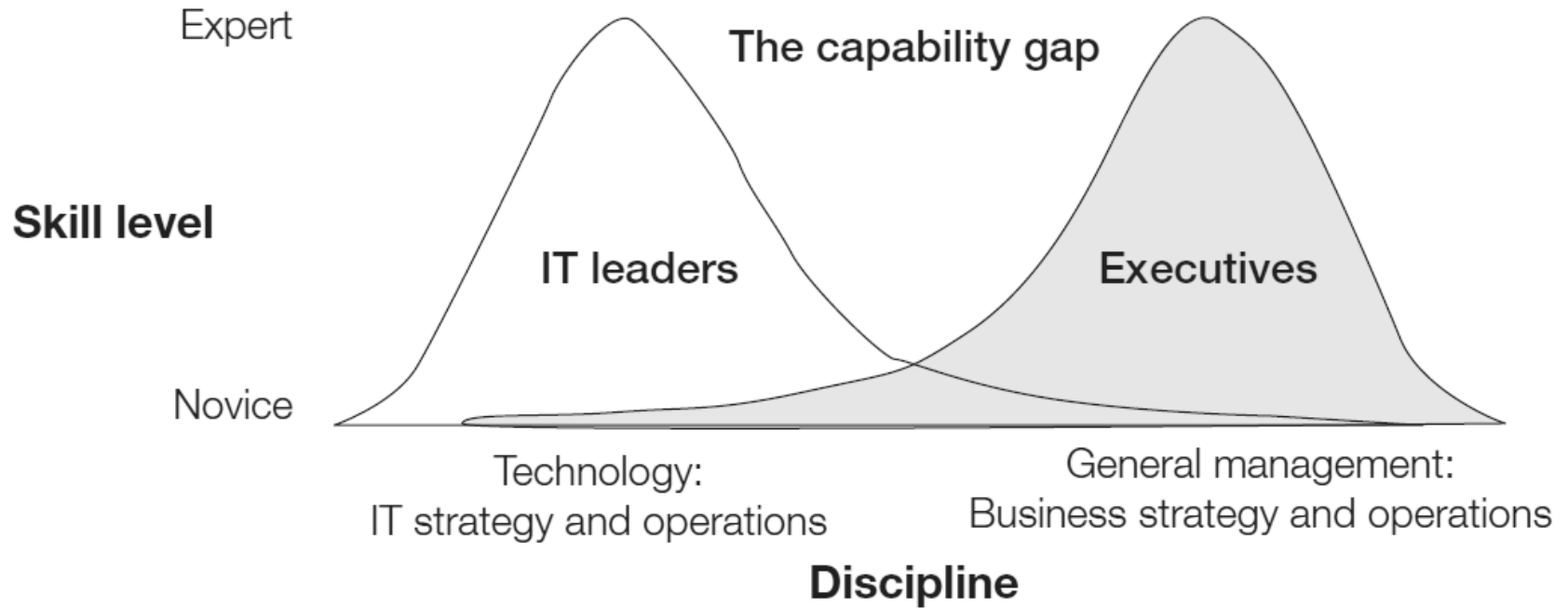


IT management is about management (2/2)

- In essence, IT management is not widely different from management of other functions (HR, finance, etc.).
 - It involves utilizing and securing resources, demonstrating results, and motivating and leading employees for results.
- Technology changes, but the principles of IT management seldom change.
- A CIO, as long as he or she is capable, is in the best position to understand every aspect of business.
 - because IT is interwoven in all business functions and operations (finance, accounting, and so on).

Capability Gap

The IT leader/general manager capability gap



- What does this figure tell us?

Successful CIOs



- What are the common characteristics of these companies?
- What are the common characteristics of the CIOs in these companies and the U.S. CIO?
- Why is Target CIO talking about *innovation*?

<http://www.csrwire.com/members/12774-Walmart-Stores-Inc->
<http://spinsucks.com/communication/fedex-customer-video-turned-good-pr/>
<http://www.wqz.com/2015/11/10/target-announces-sales-for-thanksgiving-day-at-6-pm/>

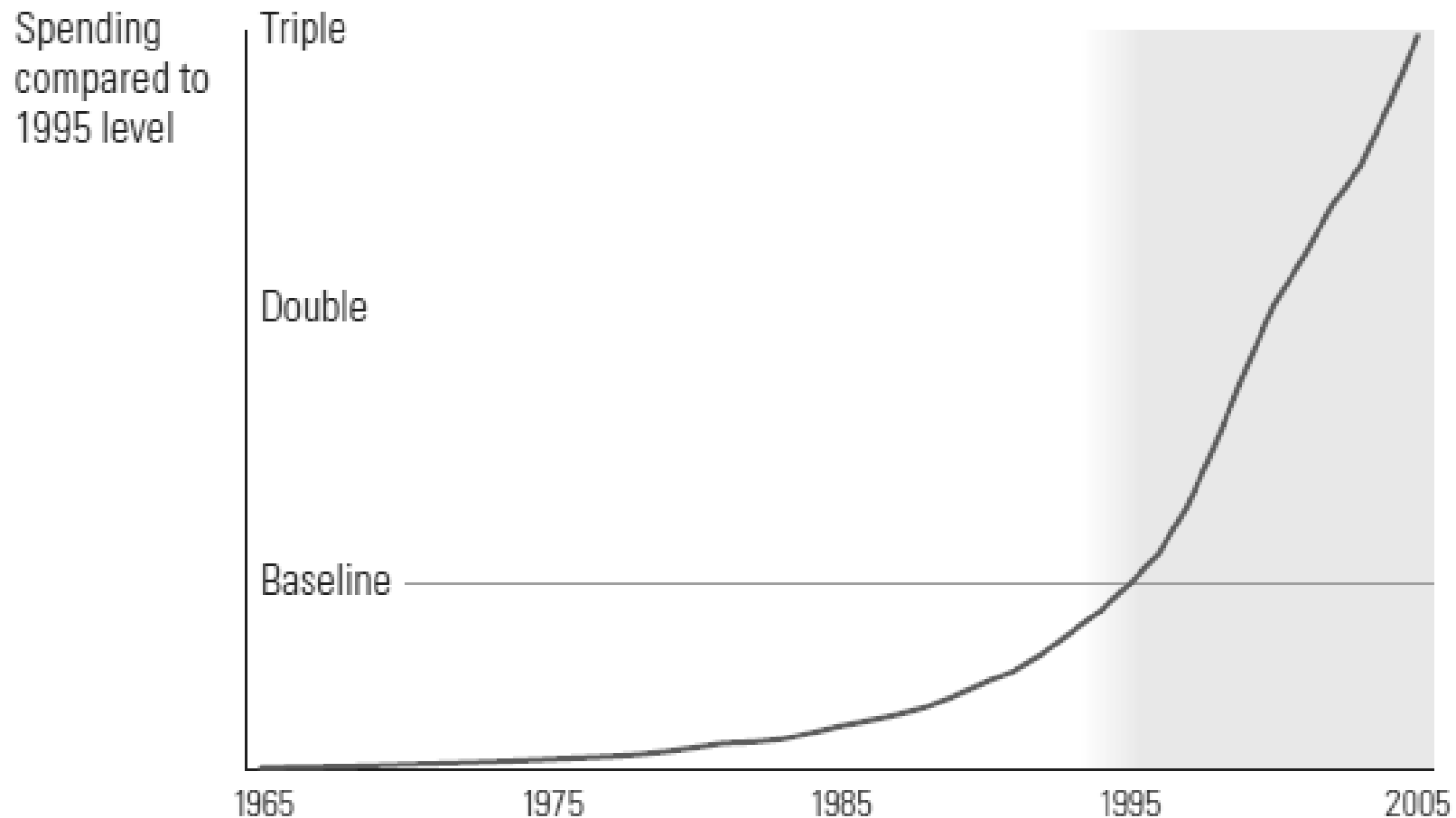
Successful CIOs (2/2)

- FedEx, Wal-Mart, and Target have become industry leaders and dominant players by strategically utilizing IT resources
 - in better understanding customers and providing superior, personalized services to them
 - in streamlining supply-chain and operation management.
- A successful, capable CIO possesses (i) cutting-edge knowledge on IT, (ii) deep understanding of business and industry, and (iii) excellent communication skills.
- A CIO is sometimes called a Chief Innovation Officer since he/she is able to leverage new, emerging technologies to develop new, innovative services and to lead strategic innovation efforts.

The IT Surge

The total real stock of IT hardware and software in the United States began to rise dramatically in the mid-1990s.

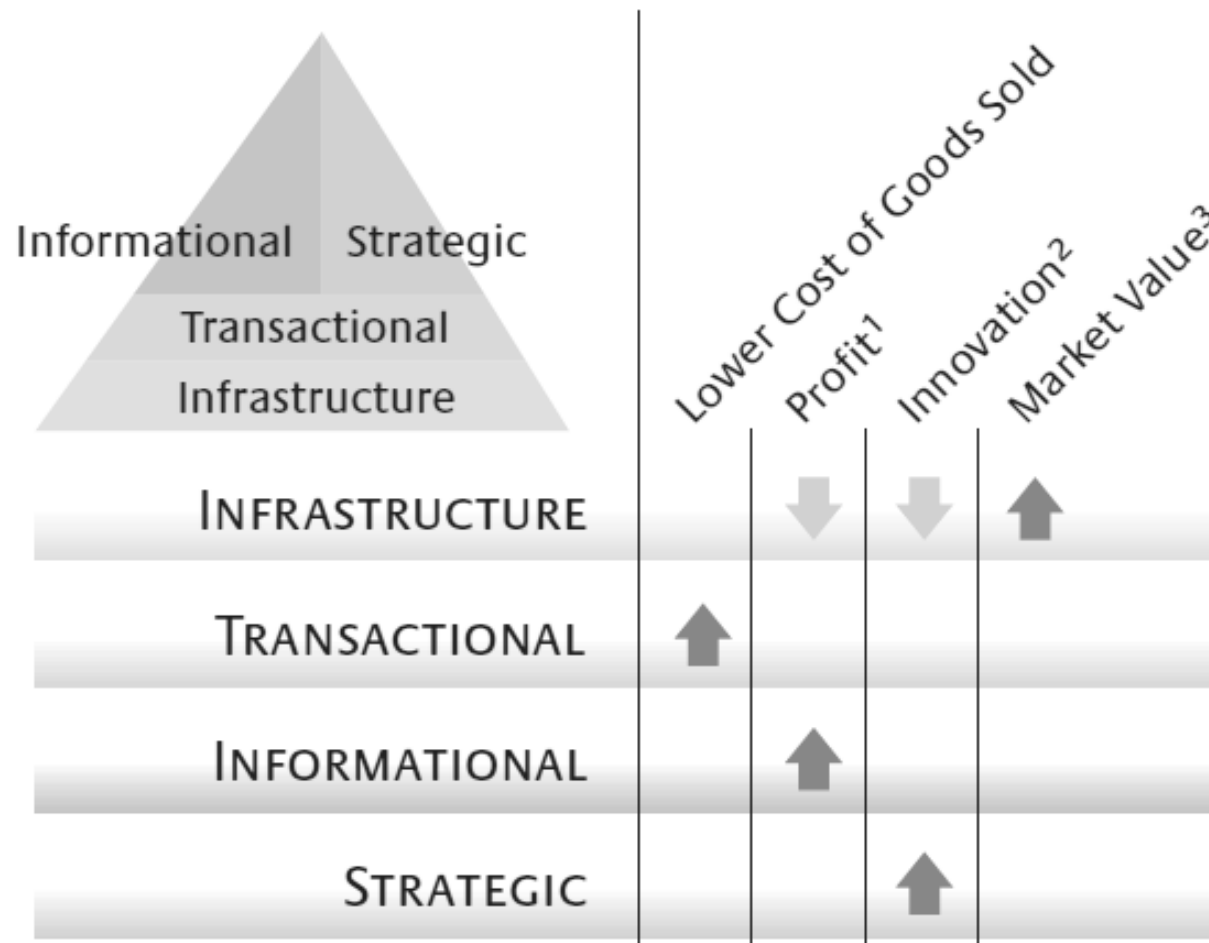
Dollar value of total U.S. corporate IT stock



Source: U.S. Bureau of Economic Account,
Harvard Business Review – “Investing in the IT that Makes Competitive Difference” by A. McAfee and E. Brynjolfsson

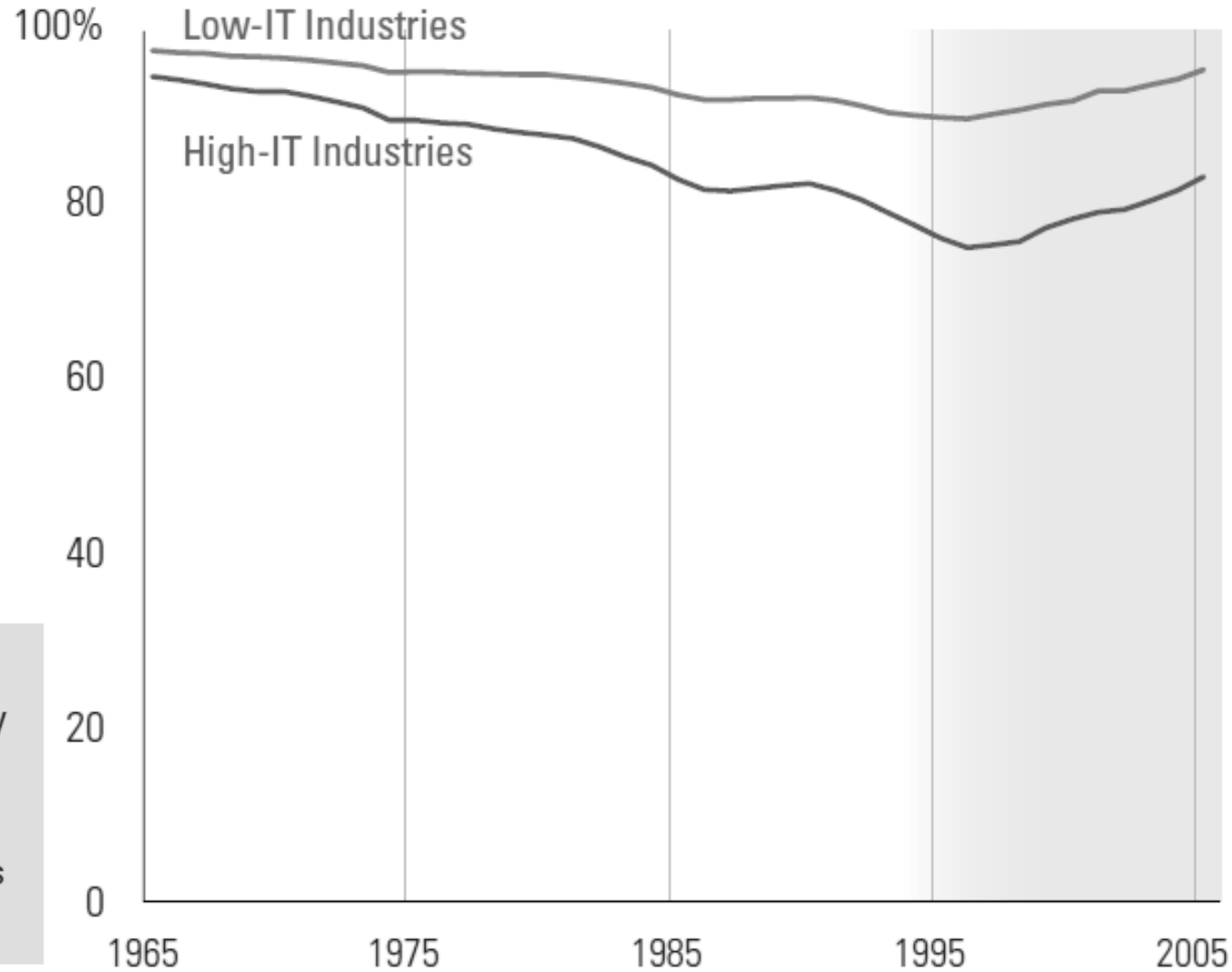
Different IT Assets Deliver Different Value

The up and down arrows gauge the average changes in profitability, innovation and market value the year after an IT investment is made. For example, companies that invest more heavily than their competitors in transactional IT have lower costs.



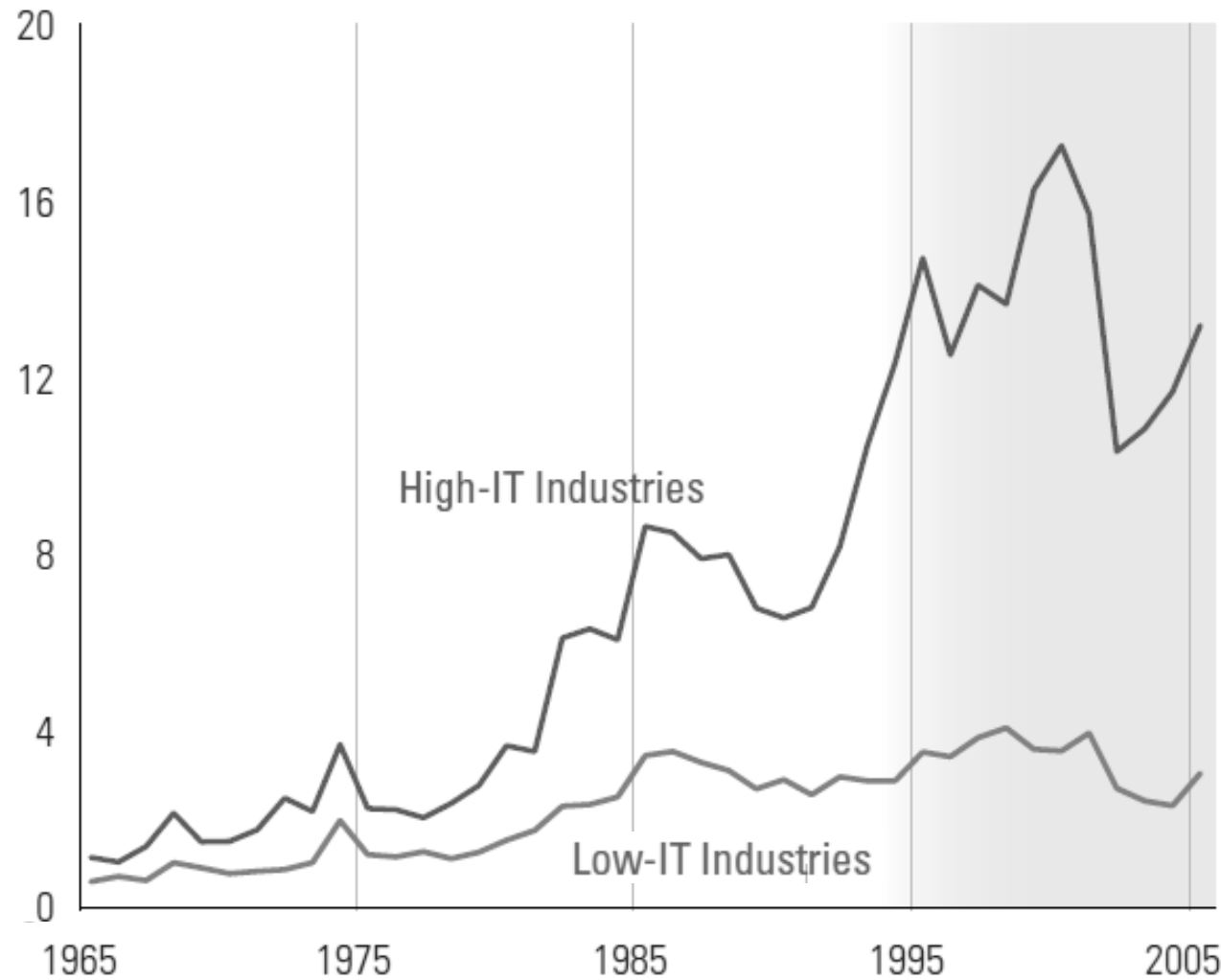
Source: MIT Sloan Business Review – “Generating Premium Returns on Your IT Investments” by P. Weill and S. Aral

Market share held by
top 20 largest firms



Industry Concentration After decades of decline in all industries, industry concentration began to rise in the mid-1990s. Though the absolute level is lower, the rate of rise is faster in high-IT industries than it is for low-IT industries.

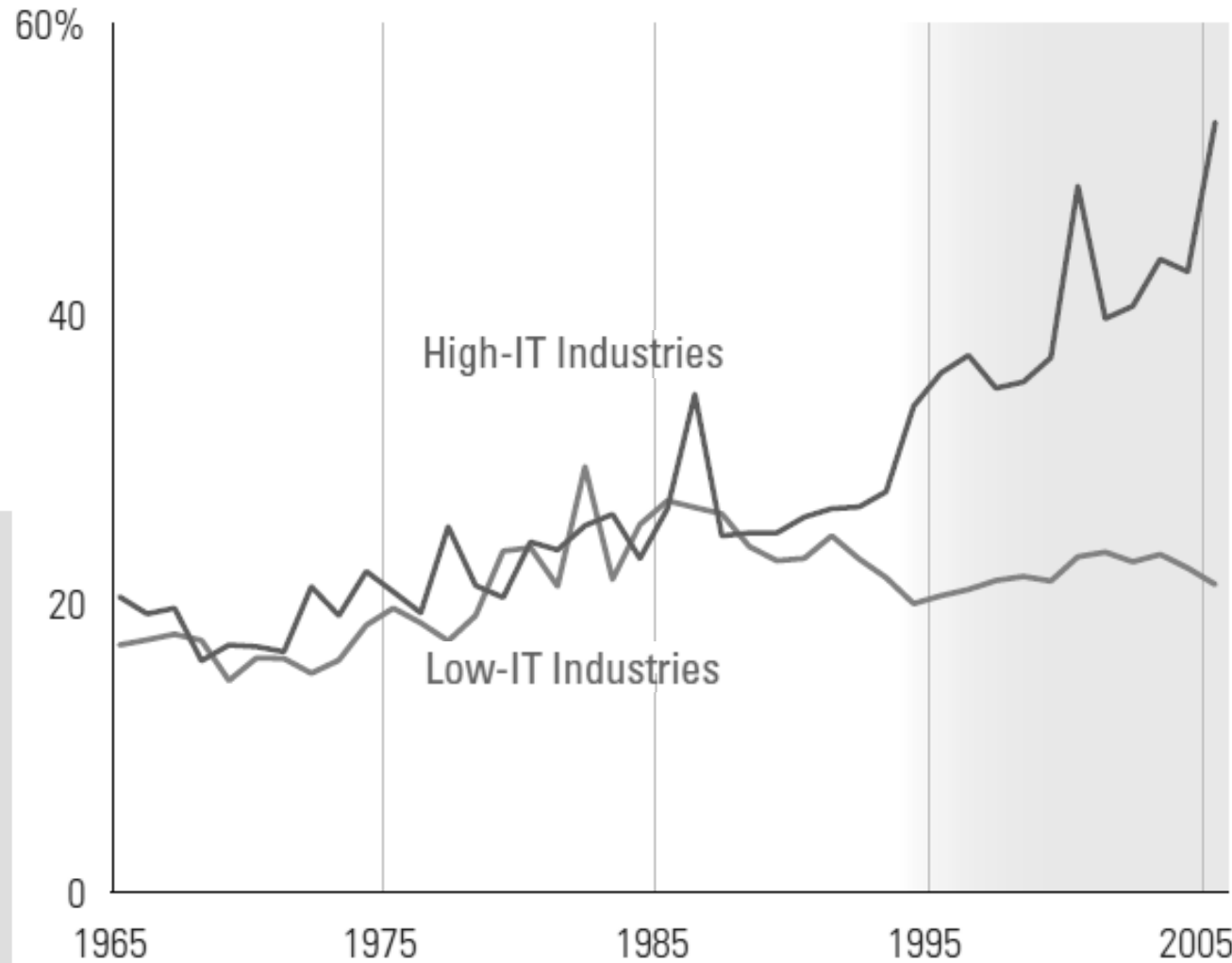
Average jump in number of places up or down the rankings from previous year



Turbulence In turbulent markets, the top-selling company one year may not dominate the next. Today's 10th place company, for instance, might catapult to number one the following year. In less turbulent markets the same companies dominate year after year and there's very little movement up and down in rank order. By this measure, we found consistently more sales turbulence in high-IT industries – and a marked increase in the mid-1990s.

Source: Harvard Business Review – "Investing in the IT that Makes Competitive Difference" by A. McAfee and E. Brynjolfsson

Percentage gap
between top and
bottom quartiles



Performance Spread The spread in gross profit margin between the company performing at the 25th percentile in its industry and the company performing at the 75th percentile – an indication of the spread between winners and losers – has grown dramatically in high-IT industries since the mid-1990s.

IT and Industry Competition

- Corporate America has tripled its IT assets from 1995 and 2005.
- Research shows that more IT spending is associated with improvements in productivity, profitability, and innovation.
- However, it has made competition more dynamic and turbulent.
 - It is harder and harder to become #1 and secure the position.
 - A winner today can become a loser tomorrow.
- What makes difference in competition with IT is not only how much a business spends on IT, but also how to use it in an effective and savvy manner.

Firms are increasingly dependent upon IT.

- If IT fails, businesses in many firms cannot function.

Forbes

Sony Freezes 93,000 Online
Accounts After Security Breach

Bloomberg

Nasdaq Chief Blames Software for Delayed
Facebook Debut

The Seattle Times

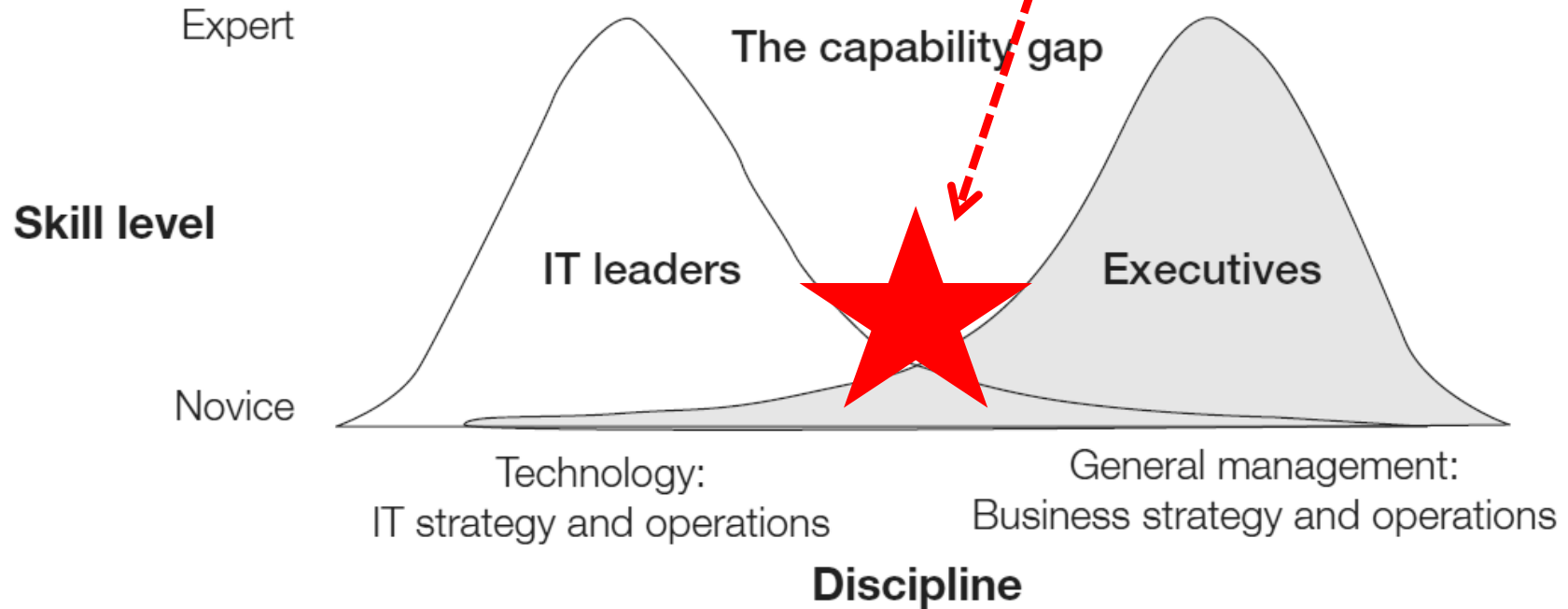
American Airlines baggage glitch causes havoc at JFK

The New York Times

Knight Capital Says Trading Glitch Cost
It \$440 Million

After taking this course, you'll be here.

The IT leader/general manager capability gap



After taking this course, you'll be ready to be

- A capable *business* leader specialized in technologies who speaks in business languages and can explain to anyone
 - How IT management should be aligned with competitive strategies
 - How IT helps firms create business opportunities and achieve sustainable competitive strategies
 - How IT resources contribute to value creation
 - How to formulate IT-driven competitive strategies
 - What skills and capabilities IT leaders in business should possess

Textbook and Required Materials

- Austin, R.D., Nolan, R.L., and O'Donnell, S., *The Adventures of an IT Leader*, Harvard Business Publishing, 2009
- Harvard Business Cases for MIS 3534
(required materials)
 - available for purchase and download at <https://cb.hbsp.harvard.edu/cbmp/access/50797212>
 - includes the required reading material for a reading brief for next class



Class Schedule (1/2)

- This is tentative and subject to change.

Week	Date	Topic	Required Reading
1	08/29	Introduction	
2	09/12	IT and Competitive Strategy (I)	Otis Elevator
3	09/19	IT and Competitive Strategy (II)	Trinity Health
4	09/26	IT and Competitive Strategy (III)	
5	10/03	Business Value of IT (I)	San Francisco Airport
6	10/10	Cost of IT (I)	IT Adventures Ch 4 & 5
7	10/17	Cost of IT (II)	IT Adventures Ch 8
8	10/24	Enterprise Architecture	IT Adventures Ch 16

Class Schedule (2/2)

- This is tentative and subject to change.

Week	Date	Topic	Required Reading
9	10/31	Strategic IT Outsourcing	IT Adventures Ch 7 & 14
10	11/07	IT Risk Management	IT Adventures Ch 10 & 11
11	11/14	Business Value of IT (II)	B&K Distributors
12	11/28	IT-Driven Competitive Strategies (I)	ITC eChoupal
13	12/05	IT-Driven Competitive Strategies (II)	Airbnb
14	12/12	IT and Your Career	IT Adventures Ch 18

Evaluation

Weekly Reading Briefs

12 briefs in total, no more than 200 words

15%

Executive Reports

Consulting reports for senior executives

3 reports in total, no more than two pages

10% (#1), 15% (#2), and 15% (#3)

40%

Homework (two ROI analyses with Excel, 7.5% each)

15%

Participation

20%

Attendance

10%

Weekly Reading Briefs (15%, 1/2)

- Before each class, write a brief of required reading materials (an *IT Adventures* chapter or an HBS case).
- No more than 200 words (The instructor will not read beyond 200 words.)
- Allowed to miss up to two briefs.
 - If you submit all 12 briefs, the two with the lowest grades will be dropped.

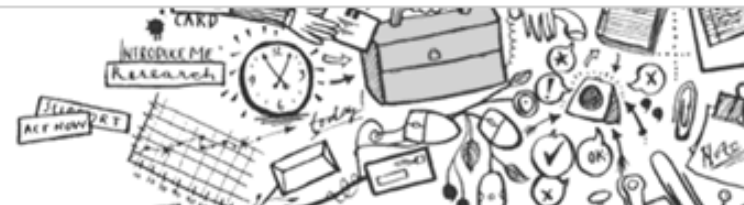
Weekly Reading Briefs (15%, 2/2)

- Due by 5:30pm on Monday. A late submission will not be graded.
- Extra credits will be given to the best brief.
 - to be considered, it must be submitted by noon.
- DO NOT COPY AND PASTE. Use your own words. Blackboard SafeAssign detects plagiarizing, with which a report will be graded ZERO.
- A reading brief is not required for today.

Executive Reports (40%, 1/3)

- Three consulting reports for senior executives
- Individual assignments
- 10% (#1), 15% (#2), and 15% (#3)
 - tentatively due by Oct 7, Nov 11, and Dec 14
- Each time, three topics will be given. You can choose any one topic amongst them for a report.

Advisory Services



Share      

Performance Technology

Cloud. Mobile. Big data. Analytics. Social media. These are more than buzz words. They represent a host of new technologies that are changing how organizations make decisions and manage information.

Today's IT professionals are focused on managing IT across the organization and keeping the business running cost effectively. Soon, an organization's future success will depend on IT delivering tangible value to the business. It will mean transcending day-to-day operational needs to help bring real change.

Our experienced professionals can help you rethink how you architect, deploy and manage technology. We can work with you to help accelerate business performance through technology transformation, enterprise intelligence, enabling technologies and technology risk and security.

Overview

About Advisory Services

Performance Improvement

Performance Technology

Risk

Library

Contacts

- ▶ IT transformation
- ▶ Enterprise intelligence
- ▶ Enabling technologies



Audit & Enterprise Risk
Services

Consulting

Human Capital

Strategy & Operations

Technology ▾

Deloitte Digital

Technology Strategy &
Architecture

Information Management

Systems Integration

Oracle

SAP

Technology



Business-led. Technology-enabled.

Business today depends on technology as never before – to drive transformation, productivity and global operations. Any technology initiative not tightly linked to specific, measurable business goals risks delivering an empty promise.

Technology is about transactional solutions handling day-to-day operations. And, it's a rich portfolio of applications and systems with wide functional breadth. Companies that integrate these assets for effective decision-making can drive their competitive advantage.

We understand the specific needs of your business, develop practical business solutions based on our deep insights and experience, and can bring change that produces results.

Our teams take an **intense industry focus** working with business **leaders** to solve their toughest challenges through applied innovation – backed by a network of global resources, deep strategic **alliances**, and full-spectrum delivery across strategy, implementation, management and operations.

Executive Reports (40%, 2/3)

- No more than two pages *including figures and tables*
 - The instructor will not read beyond the 2nd page.
 - 11-point font, Calibri (Microsoft Word default font), single spacing or more, 1-inch margin in all four sides
 - A report that does not conform to this formatting requirement will not be graded.



<http://www.cnet.com/news/man-arrested-in-news-of-the-world-phone-hacking-scandal/>

Norman Augustine, a former President of Lockheed Martin



*I have concluded that one of the stronger correlations with advancement through the management ranks was **the ability of an individual to express clearly his or her thoughts in writings.***

<http://rescommunis.olemiss.edu/2008/09/03/norman-r-augustine-at-the-university-of-mississippi/>
<https://www.aacu.org/publications-research/periodicals/one-cannot-live-equations-alone-education-life-and-work-twenty>

Executive Reports (40%, 3/3)

- The instructor will provide a feedback before the due date.
 - To seek a feedback, a draft must be submitted no later than one week before the due date.
- Students are encouraged (but not required) to collaborate with no more than two classmates.
 - Each student must submit a different individual report.
 - Each has to disclose whom he or she worked with.
- Writing quality will also be part of grading.

Component of a Typical Executive Report

1. Problem statement
2. Two or three alternatives
3. Merits and shortcomings of each alternative
4. Your recommendation and justification
5. Conclusion
 - Use of tables and figures is *highly* recommended.

Homework (15%)

- Two financial analyses with Excel (7.5% each)
- to evaluate whether a given IT project will produce a sufficient ROI.
- will be required to submit one Excel file.
- Collaboration is not allowed.

Academic Integrity

- ZERO TOLERANCE
- Plagiarizing others' work without references will be reported to the University immediately.
- All assignments are on an individual basis.
- Even with collaboration with classmates, each student must submit a different file created individually on a different machine.
- If submitted files are suspected to be work of one single person, the instructor will report to the University as a cheating, regardless of collaboration or disclosure.
- DO NOT SHARE ANY FILE THAT YOU CREATE WITH ANYONE.

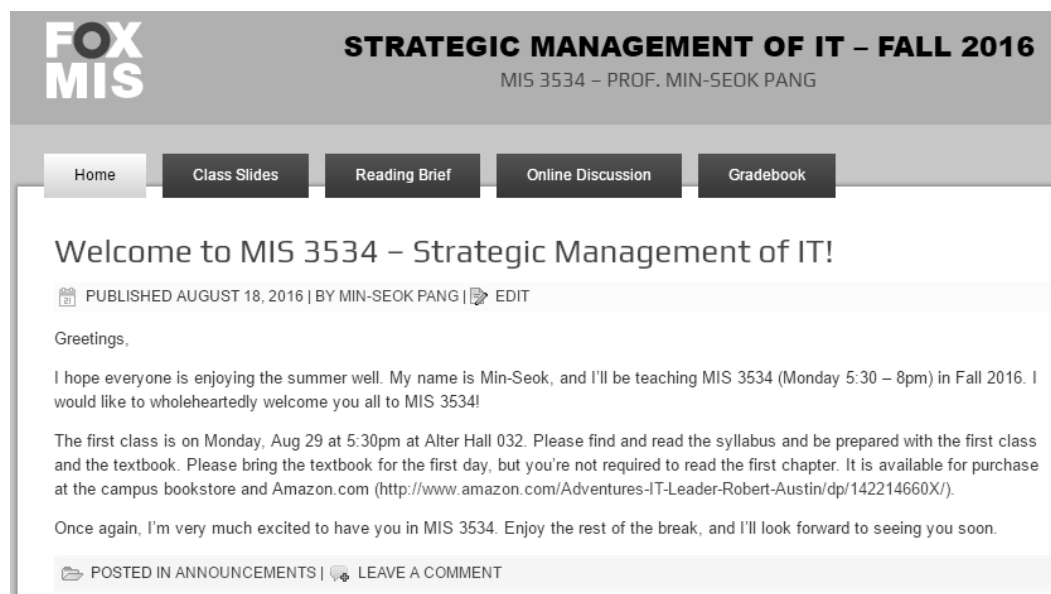
Participation (20%)

- A successful CIO requires an excellent communication skill in both a verbal and a written language.
- Students are expected to actively participate in class discussions both in-class and online (the class site on MIS Community)
- To get full credits in participation, students are expected to speak up twice a day (or write twice per week on the class site).
- To speak up, raise your hand and *wait for the instructor's cue*.
- Self-reporting participation grading: At the end of class, please submit a note with your name and your remarks.
 - If you have not said anything, do not write a note.

Tips for In-Class Participation

- Be prepared. Take a close look at the reading materials and the discussion questions (I'll post before class), and prepare for answers.
 - Try to write down an answer in a memo.
- It's okay to repeat what other students have said time-to-time. Don't be afraid.
- Set up a goal. Begin with "I'm going to speak up once." Next week, "I'm going to speak up twice," and so on.

Online Class Participation at MIS Community



The screenshot shows a website header for "FOX MIS STRATEGIC MANAGEMENT OF IT – FALL 2016" by Prof. Min-Seok Pang. A navigation menu includes Home, Class Slides, Reading Brief, Online Discussion, and Gradebook. The main content area features a welcome message from the instructor, published on August 18, 2016. The message includes greetings, course details (Monday 5:30-8pm in Alter Hall 032), and information about the syllabus and textbook. A footer indicates the post is in the announcements section and allows for comments.

- MIS Community as an online class participation forum (<http://community.mis.temple.edu/mis3534fall2016/>)
- This will be a good venue for those who miss a chance to participate in-class or feel hesitated to speak up.
- The instructor will weigh online participation as much as in-class participation.

Attendance (10%)

- Allowed to miss up to two sessions.
 - Use these chances only when it's necessary!
- Don't be late. It will disrupt class discussions and your classmates' learning.
- Leaving the classroom before a class finishes without the instructor's approval will void the attendance.

Grading Scale

94% - 100%	A
90% - 93.99%	A-
87% - 89.99%	B+
83% - 86.99%	B
80% - 82.99%	B-
73% - 79.99%	C+
65% - 72.99%	C
60% - 64.99%	C-
55% - 69.99%	D+
50% - 54.99%	D
< 50%	F

Class Policies

- Keep monitoring announcements at the class site.
- Using laptops or tablets is allowed only for class-related activities.
 - Should close laptops while the instructor plays a video.
- Please use @temple.edu account for all correspondents with the instructor. Email messages sent from a non-Temple account may not be responded.
- Please turn off or mute cell phones. Do not send emails, texts, or tweets during class.
- In case of severe weather, we will meet as long as the University is open.

Next Class

- IT and Competitive Strategy (I)
- Read the Otis Elevator case from the Harvard coursepack and write a brief of up to 200 words by 5:30pm on Sep 12.
- Discussion questions
 - What's the direction of Otis's strategic initiative and why?
 - How does IT support and enable this transformation?
- Some tips for a brief are available at the class site.