FOX | **Part-Time MBA**

MIS 5402 – Managing Technology & Systems – Spring 2017

Executive Report (50% of the Final Grade)
Final Report Due by <u>Wednesday, February 1, 11:59 PM EST</u>
Draft due by Monday, Jan 23, 11:59 PM EST

Choose <u>two</u> topics among the eight below and write two executive reports for a chief executive officer, who is either your superior or your consulting client. <u>Each report should be no more than two-page long.</u>

Topic #1 – Talent Development Plan for CIO

Ms. Rebecca Rapport is a mid-level IT manager at IVK Corporation. She has a bachelor's degree in Engineering from an Ivy League university and has been working at IVK for the last 10 years. Her performance has been valued at an exceptional level throughout her tenure at IVK. Thus, she is regarded by many at IVK as a promising candidate for a Chief Information Officer (CIO) in a near future.

While he considers her an executive material, Mr. Carl Williams, the CEO of IVK, worries that she does not have any business background in her credentials. Mr. Williams consults you about devising a talent development plan for Ms. Rapport.

Your report is expected to provide suggestions on

- why Mr. Rapport needs to develop business expertise to become a successful CIO and
- specific development plans and strategies that would help her cultivate business acumen that is required to become a capable CIO.

<u>Suggested Readings</u>

- We Mean Business – CIO Magazine June-July 2016 Issue
  http://www.cio.com/resources/110226/cio-role/cio-digital-magazine-june-july-2016
- More CIOs Are Gaining Stature as Business Strategists – CIO Magazine
  http://www.cio.com/article/2389752/
- CIOs Share How They Made the Leap to CEO – CIO Magazine
  http://www.cio.com/article/2382358/

- CIOs Boost Their Careers Doing Double Duty – CIO Magazine
  http://www.cio.com/article/2969379/
- Why Some CIOs Have More Staying Power – CIO Magazine
  http://www.cio.com/article/718439/

Topic #2 – Best Practices in IT-Strategy Alignment

Synthesize the three cases – Otis Elevator, Trinity Health, and PepsiAmericas (available below) – and write a list of best practices in IT-strategy alignment. Your report will be circulated to and read by a team of senior executives including CEO, CFO, and COO. Your report should include how these three companies successfully align IT management with business goals and make sure that IT supports and facilities the execution of competitive strategies.

Identify at least five best practices that your readers can immediately follow without much difficulty. This report cannot be a mere summary of the three cases and must contain your own ideas and framework.

Cases from MIT Center for Information Systems Research (free registration and log-in required)

- PepsiAmericas:
  http://cisr.mit.edu/blog/documents/2010/02/10/mit_cisrwp378_pepsiamericas_beath
  ross.pdf/
- Trinity Health:
  http://cisr.mit.edu/blog/documents/2011/12/19/mit_cisrwp386_trinityhealthmda_tan
  riverdidu.pdf/

Suggested Readings

- Pfizer's Future Depends on IT Transformation – CIO Magazine
  http://www.cio.com/article/2402892/
- CIO Helps Civil War-Era Company Find Its Digital Future – CIO Magazine
  http://www.cio.com/article/2379573/
- More CIOs Are Gaining Stature as Business Strategists – CIO Magazine
  http://www.cio.com/article/2389752/
- CIO Pay Tied to Overall Business Success – CIO Magazine
  http://www.cio.com/article/2392701/
- IT Provides Business Edge in Battle of Archrivals – CIO Magazine
  http://www.cio.com/article/2462173/
- Top CIOs Get Deeply Involved in Merger Deals – CIO Magazine
  http://www.cio.com/article/2465169/

Topic #3 – Business Value of e*Logistics

Mr. Ari Bousbib, the President of Otis Elevator, requests you to evaluate the success of e*Logistics. He is concerned whether e*Logistics has indeed generated sufficient business value that justifies the substantial amount of investments and convinces the board of directors and the shareholders of e*Logistics' success.

List business process changes in each of the five functional areas – Project Proposal, Sales Processing, Order Fulfillment, Field Installation, and Closing Activities – and the business values that Otis now enjoys thanks to e*Logistics. You do not need to quantify benefit factors you identify. However, your report should include intangible and/or long-term values for Otis as well.

Your report is also expected to provide strategic lessons from e*Logistics that can be applied in future large-scale IT projects; i.e. what helped Otis achieve business value from e*Logistics? What makes strategic IT investments like e*Logistics successful?

Suggested Readings

- Investing in IT That Makes a Competitive Difference – Harvard Business Review
  https://hbr.org/2008/07/investing-in-the-it-that-makes-a-competitive-difference
- Generating Premium Returns on Your IT Investments – MIT Sloan Management Review
  http://sloanreview.mit.edu/article/generating-premium-returns-on-your-it-investments/
- The Nine Elements of Digital Transformation – MIT Sloan Management Review
  http://sloanreview.mit.edu/article/the-nine-elements-of-digital-transformation/
- Innovative CIOs Show How to Make Money With IT – CIO Magazine
  http://www.cio.com/article/2390090/
- IT Value Is Dead. Long Live Business Value – CIO Magazine
  http://www.cio.com/article/2408200/

Topic #4 – Alaska Airlines IT Budget Decision

Alaska Airlines, a U.S. regional air career that operates commercial flights around U.S. West Coast, Alaska, and Hawaii, embarks an ambitious 10-year strategic plan that aims at expanding its network across the entire continental U.S. Therefore, this initiative will put Alaska in direct competition with legacy airliners such as United and Delta and low-cost carriers such as Southwest.

The senior executive team at Alaska Airlines is devising an IT investment plan that will support its expansion strategy. The following three projects are currently under consideration.

- <u>Flight Scheduling System Overhaul Project ($20m)</u>, in which Alaska would completely revamp its outdated flight scheduling system, which was developed 25 years ago when its flight network was much smaller than now and did not go beyond Seattle and Alaska.

- <u>Mileage Plan Upgrade Project ($10m)</u>, which would let customers accumulate frequent flier mileages from its code-share airlines (Delta, American Airlines, Qantas, and others) and its travel package partners (hotels, cruises, and car rentals). The customers would be able to use Alaska mileages at these companies as well.

- <u>New Data Center Construction Project ($15m)</u>, in which Alaska would build or purchase a five-story building for its data center, which is currently at the basement of its Seattle headquarter. The new data center would host Alaska's entire IT systems.

The executive team assigns $30 million for the above IT projects. You are asked to write a two-page report to recommend whether and how much each project is funded and who to fund them. Use the Five Forces model and IT Strategic Grid framework (IT Adventures Ch. 5) to justify your recommendation.

<u>Suggested Readings</u>

- Alaska Airlines, Flying above an Industry's Troubles – The New York Times http://www.nytimes.com/2013/03/03/business/alaska-airlines-flying-above-an-industrys-troubles.html
- Can Alaska Airlines Become a National Airline When It Grows Up? – TheStreet https://www.thestreet.com/story/13922258/1/can-alaska-airlines-become-a-national-airline-when-it-grows-up.html
- Can a Larger Alaska Airlines Challenge the Big 4? http://www.travelweekly.com/Travel-News/Airline-News/Can-a-larger-Alaska-Airlines-challenge-the-Big-4
- Once High-Flying, JetBlue Returns to Earth – BusinessWeek http://www.businessweek.com/articles/2012-04-05/once-high-flying-jetblue-returns-to-earth
- American-US Airways Merger is 'A New Way of Doing Business' – The Washington Post http://www.washingtonpost.com/business/capitalbusiness/american-us-airways-merger-is-a-new-way-of-doing-business/2013/03/01/24f9f0d8-81df-11e2-a350-49866afab584_story.html

Topic #5 – IT-Enabled Competitive Strategies in a Traditional Industry

Write a brief introduction of two business cases in which an IT-enabled competitive strategy disrupts a traditional industry

- by eliminating inefficiencies or bottlenecks in the existing industry structure and/or
- by building a two-sided platform that interconnects groups of customers and suppliers.

Examples include Amazon.com (retail, publishing), Netflix (media), Wealthfront (finance), FreshDirect (grocery), AirBnb (hospitality), Uber (transportation), and Khan Academy (education), all of which are driven by innovative use of IT and create potentially disruptive forces in the respective traditional industries.

- Your report is expected to introduce two cases that you find by yourself. The cases we discussed in class cannot be used for this topic.
- Your case should explain how the IT-driven strategy shakes up a traditional industry. A business case from high-tech or IT industries such as Facebook or Apple is not allowed.
- Your report is expected to clearly explain (i) what kind of inefficiencies or bottlenecks in traditional industries are addressed by digital technologies or (ii) how two-sided network effects were created.

Suggested Readings

- Platforms and the New Rules of Strategies – Harvard Business Review
  https://hbr.org/2016/04/pipelines-platforms-and-the-new-rules-of-strategy
- Break Your Industry's Bottleneck – Harvard Business Review
  https://hbr.org/2015/07/break-your-industrys-bottlenecks
- CIOs Can Help Their Companies Survive Industry Disruption – CIO Magazine
  http://www.cio.com/article/2388934/

Topic #6 – IVK Supervisory and Steering Committees for Information Technology Risks

Write a two-page report that advises the board of directors and the senior executives of IVK on a board-level IT Risk Supervisory Committee and an executive-level IT Risk Steering Committee. Your readers are the board members and the senior executives at IVK, who are very busy with other primary duties and commitments and have little knowledge and expertise on IT risk and security.

The purpose of your consulting report is twofold. First, your report should be able to convince the readers why they have to set up and be involved in such committees. Your report is expected to make a strong case that ignoring a variety of risks from IT puts IVK in a potentially grave danger and may deteriorate long-term shareholder values of IVK. Second, your report

needs to describe their duties and responsibilities in the two committees in detail. Be as comprehensive and specific as possible.

Suggested Readings

- IT Adventures Ch. 9
- Information Technology and the Board of Directors – Harvard Business Review https://hbr.org/2005/10/information-technology-and-the-board-of-directors
- The Myth of Secure Computing – Harvard Business Review https://hbr.org/2003/06/the-myth-of-secure-computing
- Developing a Common Language about IT Risk Management – MIT Center for Information Systems Research http://cisr.mit.edu/blog/documents/2009/06/09/mit_cisrwp377_itrisk_westermanhunter.pdf/
- What Makes an IT Risk Management Process Effective? – MIT Center for Information Systems Research http://cisr.mit.edu/blog/documents/2005/12/09/2005_12_3b_riskmgmtprocess.pdf/
- Boards are on High Alert over Security Threats – CIO Magazine http://www.cio.com/article/2909262/
- Why Security Matters Now – CIO Magazine http://www.cio.com/article/504837/
- How to Be a Better Leader in a Disaster – CIO Magazine http://www.cio.com/article/2406678/
- How CIOs Can Learn to Catch Insider Crime – CIO Magazine http://www.cio.com/article/702107/

Topic #7 – A Cost-Benefit Analysis of IVK Incident Response Alternatives

In IT Adventures Ch. 10 and 11, IVK needs to decide which one of the five response options to execute (doing nothing, complete shutdown, or building mirror and disclosing or not disclosing). You are tasked to conduct a cost-benefit analysis of the five alternatives. This analysis should consist of the following four parts.

- Immediate costs and damages
- Chances of a future intrusion
- Potential costs and damages from a future intrusion
- Total expected cost and damages
  = Immediate costs + Chance of a future intrusion × Potential costs from a future intrusion

In the chances of a future intrusion, it is recommended to come with three different odds – pessimistic, moderate, and optimistic and propose recommendations accordingly.

Your report will recommend one alterative that incurs the lowest total expected costs. It does not need to provide exact figures but is expected to provide reasonable justifications for your estimates and recommendation.

Suggested Readings – Same with Topic #6 above

Topic #8 – Policy Proposals in the Second Machine Age for Trump Administration

You are tasked by the transition office of President-Elect Donald Trump to offer policy recommendations for the incoming Administration. Advances in technologies such as artificial intelligence and robotics have been making tremendous impacts on jobs and employment, a trend that is only expected to accelerate. It is concerning that such technologies as driverless cars or 3D printers could endanger a range of jobs for American middle-class, which have been a backbone of U.S. economic growth for the past several decades.

What should the next Trump Administration do in the coming age of machines and robots? How can President-Elect fulfill his election pledge to bring middle-class jobs back? How can he provide economic protections to a large number of Americans who have been alienated by technology development such as automation and outsourcing? Your report is expected to offer policy proposals in such areas as economics, education, healthcare, welfare, or any areas of your choosing.

Suggested Readings

- The Giant Decoupling – Harvard Business Review https://hbr.org/2015/06/the-great-decoupling
- Artificial Intelligence Could Cost Millions of Jobs – The Washington Post https://www.washingtonpost.com/news/innovations/wp/2016/12/20/ai-could-cost-millions-of-jobs-the-white-house-says-we-need-more-of-it/
- How Technology Is Destroying Jobs – MIT Technology Review https://www.technologyreview.com/s/515926/how-technology-is-destroying-jobs/
- Can Robots Bring Manufacturing Jobs Back to the U.S.? – Time http://business.time.com/2012/09/27/can-robots-bring-back-manufacturing-jobs-to-the-u-s/
- Manufacturing Jobs Are Returning to Some Places. But These Jobs Are Different – The Washington Post https://www.washingtonpost.com/graphics/national/manufacturing-in-america/

Submission Instruction (*Read every instruction very carefully*)

- **Due Date** : Submit your two reports into Blackboard by <u>Wednesday, February 1, 11:59:59 PM</u> (Eastern Standard Time). This deadline is firm, and the instructor will not take any extraneous circumstance into consideration that occurs to you such as a PC malfunction or network outages.

- **Length** : Your report should be no longer than two pages including figures and tables. (References can appear on the third page.) The instructor will not read and grade beyond the second page.

- **Format** : Your report should be formatted in 11-point, Calibri (Microsoft Word default font), single spacing or more, and 1-inch margin in all four sides. A report that violates any of these formatting requirements will not be graded.

- **The grading rubrics** are available below. **Use of tables and/or figures** is highly recommended as it improves readability of your report.

- Refer to a **sample executive report** posted on Blackboard.

- It is strongly recommended to search and use **further reference articles** from news or magazines on your own, in addition to the suggested readings listed above.

- The instructor will provide **feedback on a draft** that is submitted by no later than <u>Monday, Jan 23, 11:59 PM</u>. No feedback will be given on submission after this deadline.

- **Late submission** is allowed, but there will be 10% deduction per each 12 hours. For example, if you submit a report on the morning of Feb 3, and it is graded 90, a 30% penalty is imposed and you will get 90 × (100-30)/100 = 63. Therefore, your submission will be graded zero after 12 PM, Feb 6.

- **Plagiarism** : Blackboard SafeAssign detects plagiarism. Plagiarizing other work in any circumstance will be reported to the University immediately as an academic misconduct.

- **Keep in mind that you are a professional consultant with hefty payment for writing this report.**

Grading Rubrics for Executive Reports

	Exemplary (A-level)	Proficient (B-level)	Developing (C-level)	Limited (D or F-level)
Organization (20%)	Presents an organized and influential message supported by very clearly identified main points. Paragraphs coherent, well sequenced and transitions display progression of thoughts/ideas.	Presents an organized, logical and effective message. Main points clearly identified. Paragraphs coherent with effective transitions.	Lacks a consistently organized, logical and effective message. Main points somewhat clear. Paragraphs reasonably coherent with some effective transitions.	Does not present an organized, logical, and effective message. Main points unclear/unfocused. Paragraphs are not coherent with ineffective transitions.
Originality of Ideas (20%)	Strong ability to synthesize and manipulate learned content, theories, tools and gathered information to create new, original and insightful ideas. Displays a keen awareness of similar existing ideas/solutions with no reformulation.	Good ability to synthesize learned content, theories, tools and gathered information to create new, original and insightful ideas. No reformulation of existing ideas.	Some ability to synthesize learned content, theories, tools and gathered information to create new, original and insightful ideas. Displays only some reformulation of existing ideas.	Limited ability to synthesize learned content, theories, tools and gathered information to create new, original and insightful ideas. Overly dependent on a reformulation of existing ideas/solutions.
Addressing the Issue (20%)	Comprehensively and clearly identifies and addresses the issue including all key components/variables and relevant information. Displays full understanding of issue.	Precisely identifies and addresses the issue including the majority of its key components/variables. Understanding of issue is not impeded by the omission of undefined variables.	Correctly identifies and addresses the issue but certain key components/variables remain unclear or omitted.	Limited ability to clearly identify and address the issue and its various components/variables.
Strategic Recommendations (20%)	Presents well-reasoned, and insightful recommendations/ decisions supported by comprehensive and reliable evidence and/or data. Little or no omission evidence.	Presents complete, clear, and realistic recommendations/ decisions supported by mostly complete and reliable evidence and/or data. Omission of some evidence does not impact overall credibility.	Presents some complete, clear, and realistic recommendations/ decisions supported by some complete and reliable evidence and/or data. Omissions of evidence may impact credibility.	Presents incomplete, unclear, or unrealistic recommendations/ decisions supported by incomplete or unreliable evidence and/or data.
Grammar & Mechanics (20%)	Generally free or almost free of any grammatical/mechanical errors.	Occasional grammatical/mechanical errors, but do not distract reader or obscure meaning.	Number of grammatical/mechanical errors distract reader and somewhat obscure meaning.	Numerous grammatical/mechanical errors that obscure meaning.