MIS 3534 Strategic Management of Information Technology – Fall 2016

Executive Report #3 (15% of the Final Grade)
Final Report Due by <u>Friday, December 9th, 11:59 PM EST</u>
Draft due by Friday, Dec. 2nd, 11:59 PM EST

<u>Topic #1 – IT-Enabled Competitive Strategies in a Traditional Industry</u>

Please write a brief introduction (up to two pages) of one or two business cases in which an IT-enabled competitive strategy disrupts a traditional industry

- by eliminating inefficiencies or bottlenecks in the existing industry structure
- 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 disruptive forces in the respective traditional industries.

- Your report is expected to introduce one or two cases that you find by yourself. <u>The cases we discussed in class cannot be used for this topic</u>.
- Your case should explain how the IT-driven strategy shakes up a <u>traditional</u> 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.
- Discussing two different cases in different industries will result in a higher grade.

<u>Topic #2 – Alaska Airlines IT Outsourcing Decision</u>

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 to 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.

- Flight Scheduling System Overhaul Project, in which Alaska will completely revamp its outdated flight scheduling system, developed 20 years ago when its flight network was much smaller than now and did not go beyond Seattle and Alaska.

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

- New Data Center Expansion, in which Alaska will build a new expanded data center. The current data center locates now at the basement of its Seattle headquarter, whose space is extremely limited. The new data center will host Alaska's entire IT systems.

Write a two-page report that proposes a strategic outsourcing plan with the above projects. Your report is required to consist of two parts. The first part recommends whether each project should be conducted by Alaska's in-house IT group or outsourced to external vendors and offers justification. In the second part, for each project to be outsourced, one of the two following options should be recommended and justified.

- An outside vendor completes the development of the project, which would last no more than one year, and afterwards, Alaska takes over the continuing operation and maintenance of the system.

- An outside vendor both completes the project and takes charge of operation and maintenance of it under a long-term contract (preferably for more than 5 years).

Suggested Readings (available at the class site)

- Alaska Airlines, Flying above an Industry's Troubles – New York Times
  http://www.nytimes.com/2013/03/03/business/alaska-airlines-flying-above-an-industrys-troubles.html?ref=technology
- M.C. Lacity, L.P. Willcocks, and D.F. Feeny, "The Value of Selective IT Outsourcing," *MIT Sloan Management Review* (Spring 1996)
- J.C. Linder, "Transformational Outsourcing," *MIT Sloan Management Review* (Winter 2004)

- J. Ross and N.O. Fonstad, "Planning a Strategic Outsourcing Profile," MIT Center for Information Systems Research
- J. Ross and C.M. Beath, "Sustainable Value from Outsourcing: Finding the Sweet Spot," MIT Center for Information Systems Research

Topic #3 – Return on Investments Analysis of GST Data Mart Consolidation

Read "Teradata Data Mart Consolidation Return on Investment at GST" and conduct a return-on-investment analysis. If choosing this topic, you are required to submit an Excel file, not a two-page Word file, that shows detailed steps in calculation, internal rate of return (IRR), and net present value (NPV).

- Annual savings can be obtained by calculating the difference between (i) the annual maintenance costs of the existing systems and (ii) the expected annual maintenance costs of new Teradata systems.
- All the necessary information for the analysis is available in the case.
- Neither a one-variable nor a two-variable data table is required for this topic.
- According to Page 9, it is estimated that the implementation will take between 10 and 14 months. However, assume that it will take 12 months and the old data marts will become abandoned on July 1st.
- Page 7 and Exhibit 8 state that there are three scenarios for the staffing requirements (the best case, the most likely case, and the worst case). Include all of these three scenarios in Scenario Manager and show a Scenario Summary that demonstrates how NPV and IRR change under each scenario.

Submission Instruction (Read every instruction very carefully)
- **Due Date** : Submit your report into Blackboard by <u>Friday, Dec. 9th, 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.

- **Use of tables and/or figures** is highly recommended and graded as such.

- 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.

- **Length and Format** : Except Topic #3, your report should be no longer than two pages including figures and tables. The instructor will not read and grade beyond the second page. 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.

- **For Topic #3, submit an Excel file** that shows detailed steps in calculation, internal rate of return (IRR), net present value (NPV), and a scenario summary.

- **Collaboration** : This is an individual assignment. However, if you'd like, you may collaborate with *no more than* two classmates. Still, each should create and submit a separate report individually created on a different machine. In addition, every student in a group must mention whom he or she work with in the file. Otherwise, it will be considered an academic misconduct and reported to the University immediately.

- **Writing quality** is part of grading. Be careful with typos and unstructured sentences, with which your CEO or client would throw out your report. Make sure that your writing is as organized and polished as possible.

- The instructor will provide **a feedback on a draft** that is submitted by no later than Friday, Dec. 2, 11:59 PM. No feedback will be given on submission after this deadline.

- **Best Reports** : The instructor will choose one best report from each topic. The best reports will be awarded extra report credits and posted on the class site.

- **Late submission** is allowed, but there will be 10% penalty per each 24 hours. For example, if you submit a report on Dec 12 and it is graded 80, a 30% penalty is imposed and you will get 80 × (100-30)/100 = 56. Due to the University deadline for the final grades, submission after Wed, Dec 14, 11:59 PM will not be accepted.

- **Plagiarism** : Blackboard SafeAssign detects plagiarism. Plagiarizing other work without citation in any circumstance will result in zero in grade and 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.**