Assignment:

Technology Opportunity/Challenge Essay

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Course: *MGT 340*

Title: Management of Emerging Technologies (3 units)

"The five functions of management are 1), setting objectives and planning, 2), organizing the group, 3), motivating and communicating, 4), measuring performance, and 5), developing people."

---Peter Drucker (1909-2005)

Goal:

I want you to reflect briefly on a substantive issue germane to this class, and I want to capture a small writing sample from each of you. This assignment is straightforward.

Objective:

In narrative essay format, I want you to describe the most engaging technology opportunity or most intractable technology challenge that you have ever encountered as an employee or individual. The technology issue can be an opportunity that is just waiting to be exploited (leveraged), or perhaps it was indeed leveraged successfully. Similarly, the technology issue can be a challenge that is just waiting to be addressed (resolved), or perhaps it was indeed addressed successfully. You can describe the issue itself, the issue and the approach (successful or not), or the issue and what approach you would take if you could.

This class is concerned with not just technology but also with the intertwined aspects of strategy, management, innovation, science, engineering, economics, and individuals. Your essay can touch upon one or more of those aspects as well.

I am less interested in which issue you select; I am more interested in your attention to detail, your critical reasoning, and your due diligence with respect to language use and grammar. More to the point, our class is concerned with *all* technology issues in organizations. The challenge for us, therefore, is to apply the theory and practice of the management of emerging technologies to address, and possibly resolve, the issue (opportunity or challenge) to deliver persistent and consistent value in the organization, especially in the face of competition.

If you have little or no work experience, you may describe an issue that you have encountered as a customer. If this is your situation, at the top of the essay simply state "I have little or no work experience". Finally, only choose an issue from the University if you are employed at the University.

As to critical thinking, the "VALUE" critical thinking rubric on page 3 of this document can be used a general guide. Beyond that minimal requirement, students should employ typical expository, composition, and communication techniques in this brief essay.

Length:

This essay is to be no less than two and one-half (2½) pages in length and no more than three (3) full pages in length. Other relevant formatting requirements ("style guide") are linked from the course web page. Recall also that for all written assignments in this course, 10% is deducted from the content score for each type of error in language use. This essay must have at least five (5) paragraphs; 50% is deducted automatically if not.

Performance Measurement:

The maximum number of points for content is 10.

Textbook Tips:

Students should read and comprehend the details in the Schilling textbook. These chapters contain key ideas that can improve the rigor of your critical thinking essay.

Some key ideas regarding strategic management from Chapter 1 are as follows:

- How is this technology related to *competitive advantage*?
- Is this technology related to *globalization*, or shorter *product* or *process* times?
- Beyond an organization, how can this technology help *individuals* or *societies*?

Some key ideas regarding strategic management from <u>Chapter 2</u> are as follows:

- Which aspects of *creativity* were (or would be) involved in the technology?
- Are *collaborations* needed to maintain or improve the technology?
- Are there *spillover effects* (positive externalities) from this technology?

Other Tips:

Students should read and comprehend the Library readings, Lecture presentations, and other materials that complement the textbook. These materials contain key ideas that can improve the relevance of your critical thinking essay.

Some key ideas from Week 1 and Week 2 readings are as follows:

- Are there any aspects of *Ethics* that apply?
- Are there any principles from *other courses* that apply?
- Is there a similarity to any of the "Technology and Your Career" PPT examples?
- Is there an element from the 'PESTEL Analysis' supplemental reading that helps *explain* or *predict* something your technology opportunity/challenge?
- There are a few Wall Street Journal articles assigned for reading in Week 1 and Week 2. Can you draw an <u>analogy</u> from an element in *your* technology opportunity/challenge to an element in *one or more* of those articles?

"VALUE" Critical Thinking rubric:

When writing a college-level essay—even a short one—it is helpful to review the basic elements of "critical thinking". The following critical thinking "rubric" is excerpted and adapted from the Association of American Colleges and Universities (AACU):

https://assessment.wisc.edu/wp-content/uploads/sites/92/2017/02/CriticalThinking.pdf

Before final submission, endeavor to see if your essay would be considered "relatively strong" on all or most of the following elements as applicable to your unique essay.

Element	Relatively Strong	Relatively Weak
Explanation of	Issue/Problem to be considered	Issue/Problem to be considered
issues	critically is stated clearly and	is stated without clarification or
	described comprehensively,	description
	delivering all relevant	
	information necessary for full	
	understanding.	
Evidence	Information is taken from	Information is taken from
	source(s) with enough	source(s) without any
	interpretation/evaluation to	interpretation/evaluation.
	develop a comprehensive	Viewpoints of experts are taken
	analysis or synthesis.	as fact, without question.
	Viewpoints of experts are	
	questioned thoroughly.	
Influence of context	Thoroughly (systematically	Shows an emerging awareness
and assumptions	and methodically) analyzes	of present assumptions
	own and others' assumptions	(sometimes labels assertions as
	and carefully evaluates the	assumptions). Begins to
	relevance of contexts when	identify some contexts when
	presenting a position.	presenting a position.
Student's position	Specific position is	Specific position is stated, but is
(perspective,	imaginative, taking into	simplistic and obvious.
thesis/hypothesis)	account the complexities of an	
	issue. Limits of position are	
	acknowledged. Others' points	
	of view are synthesized within	
	position.	
Conclusions and	Conclusions and related	Conclusion is inconsistently tied
related outcomes	outcomes are logical and	to some of the information
(implications and	reflect student's informed	discussed; related outcomes are
consequences)	evaluation and ability to place	oversimplified.
	evidence and perspective	
	discussed in priority order.	