BADM 559 Term Project: Assessing Key Controls and IT Alignment

Information Technology is an increasingly important aspect of modern business. The companies that have it and use it efficiently are better able to adapt and grow with today’s changing environment. IT alignment helps an organization take advantage of all the benefits of Information Technology. This ongoing process maximizes the value of a business using IT’s effectiveness and establishes a relationship between the business and IT that allows for innovation and growth.¹

This research paper provides an in-depth analysis of aligning IT with a business’s strategy. It is based on the presentation given by the public accounting firm Ernst & Young about both implementing a top down risk-based approach to assess key controls and IT alignment. First, using information given in the presentation, I will give a brief overview of the several steps an external auditor should perform under the risk-based approach. Next, I will give an example of a different audit organization that uses this method. Using outside information not given in the presentation, I will then discuss the negative consequences of using a risk-based approach.

The second part is a case study on aligning IT with the business strategy. I will explain the definition of IT and business alignment, what a company should do to achieve it, and the benefits of doing so. In addition, I will provide an analysis of a concept known as the “alignment trap.” Along with this analysis, I will explain how an investment firm escaped the trap and was able to align IT with their business strategy.

¹ http://en.wikipedia.org/wiki/Business/IT_alignment
To begin, the top-down risk-based approach to assess key controls explained by Ernst & Young is a process that helps an auditor identify the significant accounts that contain the highest level of risk for the company under audit. Through this process, the auditor is then better able to assess the controls related to these high-risk accounts. Figure 1 provides a diagram of Ernst & Young’s version of the risk-based approach. The three main components of this process are identifying significant accounts and related processes, documenting processes and controls, and evaluating or monitoring.

The first step in the process is selecting significant accounts based on the extent that errors could occur. The auditor should select these significant accounts based on the risk to the fair presentation of the financial statements. These key business risks have both financial and process implications that affect the significant accounts, and thus the auditor should assess each type. In addition, the auditor should evaluate both the qualitative and quantitative components involved in the selection of the significant accounts. According to Ernst & Young, these components can include errors of importance, size and composition, susceptibility to loss or fraud, transaction volume, subjectivity in determining account balance, and the nature of the account.

The next step an auditor should perform in their assessment of controls is to evaluate the financial statement assertions. These assertions are representations by management that are embodied in financial statement components. They can be either explicit or implicit and are classified according to several broad categories. These categories include existence or occurrence, completeness, valuation or measurement, rights and obligations, and presentation and disclosure.
To give some background information on these assertions, existence or occurrence states that transactions and events that have been recorded have actually occurred. The second assertion, completeness states that transactions and events that should have been recorded have been recorded. Thirdly, valuation or measurement ensures that all financial statement accounts are recorded at the appropriate amounts. Rights and obligations relates to the entity’s actual control over its assets and liabilities. The company should have rights to its assets and the liabilities are its obligations.  

Finally, presentation and disclosure relates to whether the classification, description, and disclosure of financial statement amounts are in conformity with generally accepted accounting principles. For example, assertions relating to a company’s inventory could either be under the existence or valuation category, while assertions relating to receivables would be under completeness or rights and obligations.

These assertions and the significant accounts are connected by business processes. The point in the process where transactions post to significant accounts is when the key controls will most likely be defined for a particular assertion. The three types of processes are routine, non-routine, and estimation. As stated in the presentation by Ernst & Young, this step of identifying significant processes was removed as a required step in the top-down approach to assessing controls. However, the auditor may still choose to identify these processes in order to gain a better understanding of the company under audit.

After selecting the significant accounts and identifying the related assertions, the auditor should ask What Can Go Wrong (WCGW) for each financial statement assertion. WCGW represents the statement of “risk,” and where errors are most likely to occur in the flow of transactions. According to Ernst & Young, an auditor should identify the points in the flow of

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transactions where data is initiated, transferred, or otherwise changed in some way. These points represent examples of areas where there can be a failure to achieve the financial statement assertions.

In order to help prevent the errors related to WCGW from occurring, the auditor should then identify key controls. These controls should provide reasonable assurance that errors connected with each of the relevant financial statement assertions are prevented. Reasonable assurance is meant to provide a high-level of assurance but is not absolute. The controls do not have to provide absolute assurance since it is impossible for the auditor to guarantee that all errors will be detected.

In addition, these controls should also help detect and correct any errors that occur during processing. An example of this is an error that could occur during cycle counts related to a company’s inventory.

A company can use either entity level controls (ELC) or transaction level controls (TLC). The three types of ELCs include indirect, monitoring, and direct. Indirect ELCs are controls that indirectly relate to a financial reporting element and usually cannot prevent or detect material misstatements. Monitoring ELCs are controls that identify possible breakdowns among lower-level controls. Direct ELCs are controls that operate directly at the process transaction level and are more effective at preventing or detecting material misstatements.

The different types of TLCs include manual controls, IT-dependent controls, application controls, and end-user computing controls. The auditor should choose to test the controls among the ELCs and TLCs that best address the identified financial reporting risks.

There are two different methods of control testing. The auditor can either test the design of the controls or their operational effectiveness. A test of design can include inquiry,
observation, and/or inspection. A test of operational effectiveness can also include these three elements along with re-performance. Inquiry ordinarily does not provide enough evidence by itself to support a conclusion about a control’s effectiveness, observation and inspection usually provide medium levels of evidence, and re-performance provides the greatest level of evidence of a control’s effectiveness.

The final step in a top-down risk-based approach to assessing key controls is to evaluate and monitor the process. Factors that should be considered in this evaluation may include the competence, integrity, and continuity of personnel, the degree of supervision, and the potential for management override. The auditor should make sure that they are not evaluating controls that have been manipulated by management. The auditor should also assess the company’s segregation of duties and overall stability of controls.

In addition to Ernst & Young, another well-known public accounting firm uses this approach to assessing key controls. In order to comply with Sarbanes-Oxley Section 404, Deloitte also applies a top-down risk-based approach in their assessment of key controls. Deloitte divides the process into six main phases. Figure 2 is a diagram of Deloitte’s version of the process.

The first phase is entitled Organize & Launch. This phase involves planning the process and includes meeting with management, identifying resources, determining the role of internal audit, and creating a documentation repository. The second, third, and fourth phases are Identify Financial Reporting Risks, Identify Controls That Adequately Address Financial Reporting Risks, and Evaluate Evidence of the Operating Effectiveness of Internal Control Over Financial Reporting. These three phases are very similar to Ernst & Young’s approach and include comparable methods.

3 www.deloitte.com/dtt/cda/doc/content/us_sarbanes_NAF%20013108.pdf
The fifth phase of Deloitte’s assessment of key controls is Conclude and Report. Steps involved in this phase include classifying deficiencies and reporting all findings. The sixth and final phase is Sustain and Improve. It includes leveraging entity level controls to mitigate financial reporting risks, upgrading documentation tools, and enhancing the process for communicating control deficiencies to management.4

Although both Ernst & Young and Deloitte gain many benefits from using a top-down risk-based approach in their assessment of key controls, there are also negative consequences associated with the approach. According to an article from the Wall Street Journal, the risk-based model narrows the focus of auditors’ procedures and leaves room for error.5 By using this model and only focusing on the high-risk items, auditors often pay less attention to the lower risk items, sometimes for years at a time. However, these “low-risk” items can be where the management of a company hides its fraud.

For example, as stated in the article, this situation occurred in the audit of HealthSouth Corp.’s 2002 financial statements by Ernst & Young. The auditors perceived the risk of accounting fraud to be low, and thus performed far fewer tests than they would have otherwise. Ernst & Young did not examine additions of less than $5,000 to individual assets on the company’s ledger. However, these “small, low-risk” numbers are where HealthSouth executives concealed a big part of a giant fraud.6

As a result of the risk-based approach, auditors rely more heavily on what management tells them and the auditors’ assessments of a company’s internal controls. In contrast to the top-down risk-based approach, auditors used to apply the traditional “bottom up” audit and examine all of the component parts of the financial statements, ensuring that the transactions are complete.

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4 www.deloitte.com/dtt/cda/doc/content/us_sarbanes_NAP%20013108.pdf
5 “Missing Numbers” by Jonathan Weil (WSJ)
6 “Missing Numbers” by Jonathan Weil (WSJ)
and accurate. Proponents of the risk-based approach believe the shift to be cost saving and helps auditors to focus on the areas that are more subjective or complex.

However, for the risk-based approach to actually work, auditors need to be good at assessing risk. According to Charles Cullinan, an accounting professor at Bryant College in Smithfield, “The problem is that there’s not a lot of evidence that auditors are very good at assessing risk…If you assess risk as low, and it really isn’t low, you really could be missing the critical issues in the audit.”

Regardless of the criticism surrounding the risk-based approach, accounting firms are not backing away from its concept. In their defense, auditors cannot check all of a company’s numbers, since that would make audits too expensive and time-consuming. They also should avoid becoming too predictable. If auditors choose to randomly sample-test the small “low-risk” accounting entries, it is harder for the company’s management to figure out how to sneak things by them.

In addition, according to Arthur Anderson representative Patrick Dorton, “No matter what kind of audit you do, it is virtually impossible for an auditor to detect purposeful fraud by management.” Accounting firms are continually looking for ways to improve their auditing techniques, and will look for more ways to ensure the risk-based method accomplishes its objectives.

The second important topic of Ernst & Young’s presentation was on aligning Information Technology with a company’s business strategy. Along with the top-down, risk-based approach to assessing key controls, IT alignment is another process that can bring many benefits to an organization. According to Ernst & Young, IT alignment is the practice of bringing IT into

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7 “Missing Numbers” by Jonathan Weil (WSJ)
8 “Missing Numbers” by Jonathan Weil (WSJ)
9 “Missing Numbers” by Jonathan Weil (WSJ)
According to a company’s overall business strategy. Using another definition, IT alignment is the coordination of the IT strategy with the business strategy.10

Before a company’s IT is aligned with its business strategy, IT is simply a support function, which can have several negative consequences. In this stage, IT will always be trying to keep up with the business requirements and attempting to catch up with market demands. It also fails to meet expectations, misses deadlines, and it has limited involvement with the business strategy.

However, when a company achieves IT alignment, IT plays more of an active role in the business. It helps the company meet the expectations of stakeholders, achieve deadlines and targets, and allows for effective communication between IT leaders and the rest of the business. In an ideal situation, the IT department would be tightly connected with the business objectives. It would provide many services used to enable business functions and meet the goals of the company, and would occur in an environment that influences strategy implementation. Overall, the business strategy would drive the IT strategy, which would further enable the business strategy itself.

Once the company is successful at IT alignment, it has the potential to reach IT convergence. In this stage, the business and IT are synchronized, IT is involved in all strategic decisions, and expectations and targets are exceeded. In addition, there is strong communication and collective goals between the two sections of the company. Therefore, by not aligning IT with the business strategy, an organization would be at a disadvantage when compared to companies who are successful at IT alignment. In addition, the company would miss many opportunities for improvement.

10 www.informationweek.com/news
In order to avoid being at a disadvantage, an organization should focus on the three drivers of IT and business alignment. These drivers are direction, development, and delivery. Direction is associated with the financial oversight and strategy of a company. It involves governance over annual budgets, approval of IT budgets, and monthly IT spending. In addition, the company should get approval of unbudgeted expenditures and communicate the business direction to IT.

The second alignment driver, development, is related to applications and technology programs. Under this driver, the company should adhere to IT standards, and focus on application and business requirements. The company should also be aware of formal and mature IT processes. The final driver, delivery, deals with operations and IT service delivery. The company should focus on communicated expectations, monthly performance reporting, and project prioritization. It should also make sure that it has high quality and reliable data. According to Ernst & Young, these three drivers will form the foundation for effective IT alignment with business objectives.

As explained in the presentation, the internal and external stakeholders of companies are increasing their expectations of the value of IT. Instead of being a risk to the company, stakeholders are hoping that IT will ultimately become a valuable business function of their companies. Internal stakeholders can include the CEO, Board of Directors, or Audit Committee. External stakeholders are the customers and investors of the organization. There are three different stages of IT. IT can be a risk, a cost, or a business function. IT begins as a risk to the company. This stage involves IT governance and management, data governance, and regulatory compliance.
The stakeholders hope IT will eventually move to the cost stage. This stage is when IT helps lead to greater cost efficiency, a reduction in time spent performing tasks, a reduction in dollars spent, and a higher ROI. The business function, or value, stage is what the stakeholders ultimately strive to achieve. They want IT to be a part of the company’s strategy, information security, a driver of shareholder value and revenue generation, and involved in decision and communication processes.

In order to achieve the IT value stage, both business and IT needs should be balanced across three different categories, or “pillars.” These three categories are IT and business alignment, cost and effectiveness of delivery, and compliance and risk. The organization needs to focus on all three areas in order for it to be successful in integrating IT with the business strategy.

The first category, IT and business alignment, focuses on developing one cohesive strategy. If IT’s strategy is different from the business’s strategy, the company will not be able to achieve the benefits of IT alignment. This “pillar” also emphasizes having the necessary communication and being aware of the increasing demands associated with IT and business alignment.

The second category is cost and effectiveness of delivery. In aligning IT with the business strategy, the company should pay attention to cost-effective processes that can help it to achieve its goals. For example, the company could determine whether outsourcing is a viable option, while focusing on data quality and timeliness.

The company should also be aware of the third “pillar,” compliance and risk, when balancing its business and IT needs. It should understand the requirements associated with IT alignment, such as obtaining any certification or performing risk assessments. The company
should also make sure the processes associated with aligning IT with the business strategy are sustainable.

Balancing a company’s needs across these three “pillars” can be a difficult task. There can be many problems associated with the process. In response to these issues, the business management and the IT department may disagree as to the extent of each other’s responsibilities, and blame the other for any problems that arise. From the IT perspective, the alignment issues may be related to culture issues, technical complexity, and/or communication problems. IT leaders also may believe there to be issues because few IT resources have actually dealt with business customers.

On the other hand, the business view may be that IT does not know what the business actually needs and does not always meet expectations. As explained by Ernst & Young, IT alignment is actually the responsibility of both business management and the IT organization within a company. They must each work together in order to successfully achieve IT and business alignment.

To achieve this balance between the needs of the business and IT, the company should consider several important factors. First, the company should work on improving the communication between IT and business leaders. Without an effective communication process, the company will not be able to combine the IT objectives with the overall business strategy.

In addition, improving the maturity of critical IT processes and streamlining the management of IT services will help the company realize its goal. Since the internal and external stakeholders are increasing their expectations about the value of IT, the company should also leverage a more comprehensive approach to IT risks and controls in order to meet these
expectations. Finally, by using IT to contribute to important business decisions, the company can build credibility for the value of IT.

When a company follows these steps and is successful at aligning IT with the business strategy, it can realize the many benefits associated with alignment. As mentioned in Ernst & Young’s presentation, a study performed on corporations across fifty industries from 2002 – 2006 revealed that companies which were aligned had better financial results than companies that were not aligned. The findings showed that about 29% of the companies had higher earnings per share, and about 14% had a higher return on investments. In addition, 8% had higher revenue growth, another 8% had a higher return on assets, and 4% had a higher return on equity.

Along with having better financial results, organizations that are effective at IT alignment exhibit several additional positive traits. The most important one is having a formal IT strategy that is based on the overall business strategy. When these two strategies are connected and are able to reinforce each other, the company is in a better position to take advantage of more opportunities. Another trait is having stronger communication channels. If this occurs, the IT department is more aware of the overall business objectives and can respond faster to issues that arise.

An aligned company also has a better process for structuring, organizing and prioritizing projects. Instead of having two separate processes between IT and the business, the company can have one cohesive process that meets the objectives of both. By working together, the company can also continually improve this process.

In addition, an aligned company will have a more formal and integrated organizational structure with a higher capacity for knowledge sharing. It is easier to learn from other areas of
the company when its structure is clearly defined and people from all departments work together to achieve common objectives. Other traits of aligned organizations include having leadership support, mature and documented IT processes, integrated business and technology architectures, and the flexibility and adaptability to change.

The final section of this paper is a description and analysis of the “alignment trap,” and a company that was able to get out of the trap and become successful at aligning IT with its business strategy. This analysis is focused on the investment firm Charles Schwab. This company helps people save, invest, and manage their money, and is a manager of retirement plans for companies of all sizes. According to an article that discusses the “alignment trap,” this investment firm was able to work itself out of the alignment trap with impressive results. In other words, Schwab learned how to connect its IT with the business strategy to gain an advantage over its competitors.

Before explaining how this company achieved alignment, a description of the “alignment trap” is needed. This trap occurs when a company attempts to align IT with its business strategy and the performance of IT actually gets worse. In most cases, the harder the company attempts to get out of the trap, the worse it gets, leading to a downward spiral. IT costs rise, causing the business performance of the company to suffer. In this situation, the IT of a company acts as a barrier to business growth and performance.

There are several common signs of the alignment trap. A company is likely to be trapped when IT costs too much and takes too long. In addition, when a company’s business performance suffers and the blame goes to IT, the trap is likely to occur. Other signs include the

11 http://www.aboutschwab.com/
lock-up of valuable data assets, the over-customization of IT systems, and the ineffective setting of IT priorities. The article explains that for the companies in the alignment trap, the key may be to temporarily sacrifice some degree of alignment in order to avoid over-investing in it, which may create additional problems. The first step the company should perform is eliminating any unnecessary complexity by simplifying the IT environment where possible. It should also shift to common and off-the-shelf solutions.

Next, the company should “rightsource” all of its IT capabilities. “Rightsourcing” means sourcing the right IT capabilities, from the right source, at the right cost. The third step the company should take is to work on building capability to achieve business expectations on time and on budget. Further steps to take in order to get out of the alignment trap include coordinating the business and IT strategies, agreeing on where to invest, and ensuring business and IT accountability. The IT of a company should be focused where it really matters and can make a difference. In order to ensure accountability, the company should establish roles and responsibilities and commit the right business resources. Schwab is an example of a company that was able to get out of the alignment trap. It followed the steps described in the article and learned how to successfully align IT with its business strategy. Before doing so, Schwab was put at a competitive disadvantage by being in the trap and over-investing in alignment. Many of this company’s competitors in the industry were beating it on price. Schwab was also spending up to 38% more on IT than other

comparable companies were. These high costs limited Schwab’s ability to respond to issues that arose.\(^\text{17}\)

In order to fix these problems, Schwab first decided to simplify and rationalize all of its important applications. Next, it “rightsourced” its IT by sourcing the right capabilities at the right source and cost. The last step was focusing on the right level of alignment. To achieve this, Schwab redesigned processes to improve demand management, and restored the link between its IT and business strategy.\(^\text{18}\)

By successfully getting out of the trap and effectively aligning IT with the business strategy, Schwab’s actions brought about many impressive results. For one, the company’s cost per trade was reduced by more than 50%. In addition, the time to execute trades at peak times went down 80%.\(^\text{19}\) Overall, by learning the correct way to achieve IT alignment, Schwab found its growth potential, got rid of unnecessary costs, and was able to gain an advantage over its competitors.

Overall, this paper has provided a detailed overview of an external auditor’s top-down risk-based approach to assessing key controls, and an in-depth analysis of aligning IT with a business’s strategy. First, I explained the several steps in the risk-based approach, and compared Deloitte’s approach with Ernst & Young’s. I then described how the risk-based approach can narrow the focus of auditors’ procedures and leave room for error. In addition, I provided an analysis of IT alignment, the “alignment trap”, and an example of a company that escaped the trap. Through my research, I learned about recent developments concerning IT that were not discussed in class. I am now more aware of how important IT can be to the overall success of an organization.

\(^\text{17}\) http://www.bain.com/bainweb/Publications/multimedia_detail.asp?id=26137&menu_url=multimedia.asp
\(^\text{19}\) http://www.bain.com/bainweb/Publications/multimedia_detail.asp?id=26137&menu_url=multimedia.asp
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Main Source: Presentation given by Ernst & Young to BADM 559 on September 10, 2008

Title: An External Auditor’s Guide to Implementing a Top Down, Risk-based Approach to Assess Key Controls and The IT Balancing Act

Speakers: Rich Castle and Aileen Wright Bacon

Additional Outside Sources:

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Figure 1: http://www.ey.com/global/assets.nsf/Israel/SOX_Seminar_-_Ariel_Horowitz/$file/SOX-Risk%20Approach-Horowitz.pdf: Page 5

Figure 2: http://www.deloitte.com/dtt/cda/doc/content/us_sarbanes_NAF%20013108.pdf: Page 6