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CIS 410

Midterm Exam

Due 10/22/12

1) IT architecture and organizational structure are both used to assist a company make money now and in the future by clearly defining the company’s direction and purpose. If they are implemented correctly they can complement one another and lead to progressive growth and prosperity. IT architecture defines the tools and the structure the organization will use to process data in order to create high quality products or services for their respective consumer (Cash). A company’s organizational structure enables members of the organization to begin those activities defined by the IT architecture. The activities are based on the division of labor, which allows the organization to control many parts of the labor force by using specialization, standardization, and departmentalization of activities and functions. With the proper supervision of upper management, procedures and employee interaction, the company will have the ability to comprehend the internal and external boundaries of which they operate (Cash). Understanding the tools, tasks and environment allows the organization to understand their own strategy, which allows them to make well-informed and profitable decisions.

In the IRS case, the main tool they used was the Automated Collection System (ACS), which helped employees manage the immense amount of data traveling throughout the organization. The IRS’ IT architecture was flawed due to their excessive paper use and the poor communication techniques inside the Collection Office Function (COF). The process of collecting and processing taxpayer data was using copious amounts of paper and time when communicating the information between different divisions. The structure is separated into six divisions of labor such as the Collections Office Function (COF); the collections office is equipped with the skills and knowledge used to manage returns and unpaid bills for taxes. The boundaries of the COF consisted of any person that pays taxes, the economical environment and the operations of the related divisions. The main weakness of this structure has created the inefficiency of the work being completed. The employees are being forced to go out of their way and often to different departments in order to find personal information about the taxpayers. Adding these extra steps increases the amount of calls and paperwork the employees must deal with.

The combination of the IRS’ IT architecture and organization structure affected the issues in a positive and negative way. Prior to the use of the ACS system, the IRS had issues with the distribution and collection of information. The IT architecture, prior to the ACS system, did not collaborate well with the divisional organizational structure. When an employee working inside the COF needed to track a taxpayer’s telephone number or address, they required a long process of phone calls and reports to retrieve the information due to the disparity of the divisions. The architecture needed a centralized system to hold any and all information that the six divisions could use to track or retrieve taxpayers. The IRS was able to function profitably because the employee culture consisted of older men and women that have been working in the organization for a very long time. According to these employees, the system can be tedious but it is still successful because it is all they have ever known. The combination of the IT architecture and organization structure, after the implementing the Automated Collection System dramatically changed the culture because they needed new employees who knew the system well and could train the veteran employees. The new system gave the IRS an advantage because it reduced the amount of employees they needed and increase the productivity, income and lowered inventory. Given the culture of the IRS, the organization has positioned the IT architecture using a top down approach. The company is using a new system to better improve the productivity of the organization even though it drastically changes the structure and culture. IRS is looking towards the long term rather than the short term, in order to sustain profitability and desirable outcomes now and in the future.

Symantec used a software communication tool to enhance the sending and receiving of information between numerous departments. Symantec’s IT Architecture had issues with losing important information due to slow and unreliable internal communication channels as well as poor email and phone systems. When information was lost in transition, problems occurred during the development of software and could even affect the value at the customer service level. Symantec’s organizational structure started out modeling a very small company and the proper communication flow was merely talking loudly in a small room. As their company grew from numerous acquisitions, it was essential their organizational structure evolve as well. The organization was separated into five divisions, which they called product groups; together each product group created a diversified and high quality software product for the Symantec customer. Each division created a great deal of physical boundaries because only a select few were centrally located in the organization’s head quarters while the others were spread out all over the United States. Breaking through these communication boundaries proved to be Symantec’s first organizational impediment.

Even though Symantec’s IT architecture interaction was not ideal for communication throughout the organizational structure, it was still producing high quality products and generating large profits. The IT tool was not able to support the high level of traffic between the divisions of the organization. This affected the culture because the employees were often frustrated by the miscommunication and the poor quality of the email and phone systems. Given the company culture of Symantec, they have positions the IT architecture using the bottom up approach. The organization is still using existing processes, tools and structures because they continue to generate positive results even though the employees are having issues with communication.

2) The purpose of using a control system is to increase the likelihood of a positive outcome with respect to unexpected changes in technology, markets, competition, and other areas in an organizations environment (Cash). The band “The Who” wrote a song that can be related to the concept of a control system. The song is called “Won’t Get Fooled Again” and the song ends with a peculiar quote, “Meet the new boss; same as the old boss”. After listening and analyzing the song multiple times I believe the last two lines mean that things wont change no matter how hard you try to change them. The song goes on to explain an attempt at creating a revolution by battling in the streets. Although, as it goes on longer they realize it all begins to look just like it did before the battle had started. It could mean power will always force corruption in management, no matter how much the change is wanted by everyone.

Relating this to business and IT, I believe it means no matter how you change the control systems of an organization it will always end up as it was before. Although I do not agree with the logic of this statement, I can understand how it is applicable in certain situations. Control systems have three approaches of controlling within an organization. These controls are people control, action control and results control. Although each type is different from the next, they have one very important similarity. They are all used to control an expected outcome, which means they are a means to an end not an end in itself. By this definition, switching control systems will not change the way the organization ultimately conducts business. I believe this similarity is the only possible reason the quote “Meet the new boss; same as the old boss” could be true. My reasoning is because if the new management wants the same expected outcome as the old management, then it is very likely that no matter how much the means changes it will always come back to the same end. For instance, if the “new boss” were to use a people control system whereas the “old boss” used the action control system but both of the bosses wanted to create higher income, lower inventory and higher productivity, then the different means would meet at the same end. This theory would affect the culture of the organization negatively because it is very difficult and costly to change management control systems with such a large amount of people. Also, most people do not like change especially if the change is going to lead to the same ends as before. Even if the end result was not exactly the same, it could appear that way to the internal and external environment. Therefore “Meet the new boss; same as the old boss”. If this were true it would mean that the organization should not only change the control systems of the organization, but also change the strategy of organization. The culture of organization would be affected if the control systems were changed because it would change the way the employees interact with each other and how the managers control them.

I believe organizations can change and therefore I do not agree with the quote “Meet the new boss; same as the old boss”. I do not agree with this because if organizations want or desperately need to change their control system or organizational culture, they have the ability to do so as long as they are financially stable and willing. Control systems are intended to increase positive outcomes so if an organization deems a new control system as the answer then they have the ability to change the way they operate. The stipulation here is if any organization decides to change one control they must also change some aspect of their overall organizational strategy. Culturally, this is a much easier task for a small, flat organizational structured company. The small amount of employees and organizational layers allow for flexibility and change much easier than larger companies. Large multi-layered, and top down organizations may have a more difficult time making changes due to the long communication channels and overall size of the company. The CEO will have to communicate down throughout the entire organization and ensure every employee is on the same page for the transition. This is an enormous cultural change because the process leading up the maneuver may be as time consuming at the change itself.

3) Here at the University of Louisville there are many uses for control systems. A single control system can be used in many places through out the university and any single place may have many control systems within it. Control systems are the measures, criteria, and processes management can use to evaluate particular entities. People Control systems are valuable because management selects people with the appropriate skills, values, and personality characteristics for a specified position (Cash). This can offer the best opportunity for management to find exactly what the organization needs for a particular task or function.

A) The first person control is the application process to the university because the university’s enrollment office acts as the management as they evaluate, accept and deny potential candidates. They are selecting students with the appropriate qualities they are looking for, whether it be GPA, ACT scores or any number of other factors. The resume, transcript and application are the measures of the person control system. The criteria of the internship are the minimum GPA or ACT scores they have set in order to attend the college. Once the university has made their final selection, and those selected have committed, they begin training students. The training is the process of getting the student ready for a career by using orientation, introduction seminars and ultimately all of the classes the student will take until he or she graduates or leaves the college.

The second person control system at the University of Louisville would be the interviews students could obtain for either on campus internships or possibly off campus internships. This process has many layers because the applicants must be screen numerous times. The first set requirement is the GPA, which is screened through the career track website or another process. The next step would be on the phone or in-person interviews. The measures are the organizations hosting the interviews. The criteria are the requirements they set such as GPA and major. The process is the entire application, interview and selection procedure, which evaluates the potential new hire.

The third person control system is a class at the university. The professor increases the student likelihood of achieving the desired outcome of have a successful career after college. The measures of the class are the student’s transcript, which shows the successfulness of the student. The criteria are taking all of the prerequisites for the class and ultimately graduation. The process is being prepared for a career after graduation.

B) Action controls are used when managers specifically identify what the individuals and divisions of the organization must take in order to reach an end goal. The difference between person control systems and action control systems is that the goals may not be the same in the two systems. Within an action control system, the different divisions may be performing different tasks but they will all contribute to the same overall purpose.

The first action control system at the University of Louisville would be a class that a student is taking. The measurement of the class is the rules and procedures the professor enforces such as what is listed on the syllabus. The criteria are those rules the professor set in place such as an attendance or tardiness policy. The process for obtaining the evaluations of a student is done by tracking grades and attendance with the purpose of teaching the curriculum as well as responsibility.

The second action control system is the college student advisor for specific schools within the university. The advisors are here to assist students with their class schedule every semester as well as any general questions. During the scheduling time period, the advisors tell the students exactly what classes they need to take in order to graduate. The desired outcome for each student is graduation and the advisors are taking action to get him or her to that point. The measures are the school of which the student is studying and the major they have declared. The criteria for comparing them are the classes they have taken and how well they have done in those classes. The process of measuring the student’s progress is comparing the classes they have taken versus the classes they are supposed to take in order to graduate in four years.

The third action control system is the university’s meal plan system. Each freshman at the University of Louisville is required to have a meal plan if they live on campus. The meal plan has a set amount of “meal card money” on them as well as “swipes” for The Ville Grill restaurant. This money can only be spent at participating on campus restaurants and at the end of each semester it cannot be refunded. This system controls the actions of each student by implicitly forcing them to eat the food on campus so they don’t waste the real money that was forced onto their meal card. The measures are the amount of meal card money each student has and the amount of places they have to spend it. The criteria by which they can judge their performance, is the expectation of having spent all of the money by the end of each semester. The process is measuring the amount of meal card money and number of swipes the students should have spent at certain points in each semester because this will ensure their account reaches zero by the end of finals week.

C) Result control systems compare the performance levels of the expected and of the actual work completed. When the results are not up to the expected standards of the organization, the organization or individual is then under strict supervision to ensure the performance meets the standard once again.

The first result control I found is a class at the University of Louisville. The professor compares the student’s scores on assignment and exams to the best possible outcome for the particular coursework. Some professors will compare the class average to his expected average and curve the class average so the students will receive more points on their overall grade. The measures for the class are the professor grading assignments and exams. The criteria of the class is measured by the assignments and exams that are taken and the material they cover. The process is preparing for future classes and a career after college.

The second result control I found is the national college ranking system. The ranking system finds the top college in the nation and compares every other college to the level of what they consider to be the best. The measures of the colleges are the experts ranking the aspects of each school based on numerous factors. The criteria for comparison are the factors of which the experts measure each school by. The process then uses the gathered data to put the colleges in a numerical order from highest to lowest.

The third result control I found is the student’s graduation requirements. Each student is required to take a certain number of classes pertaining to their respective major. The results control system compares the classes they must take in order to graduate with the classes they have currently taken or are taking in the present semester. The amount of credit hours he or she has taken will determine the university’s classification of the student’s current year in school. The measure would be the University of Louisville managing the classes the student must take for a particular major. The criteria would be the classes the student has completed in their major. The process would be measuring and comparing the student’s completion percentage in order to calculate their projected graduation date.

Works Sited

Management of Information Systems by Professor Barker:

Porter’s five forces