Systems Development Life Cycle Course Project

IS316 – Computer Systems Analysis and Design II

Systems Development Life Cycle Course Project

**System Migration Plan**

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| **System Migration Plan** | | | | |
| **Initiation** | **Future System Analysis** | **Preparing the Technology** | **Execution** | **Closing** |
| 1. Technical Conversation  -Style of program switch  -Parts of the  organization converted  -How much of the  system converted at  what time | 1. Content  Security | 1. Install  hardware | 1. Revision  of policies | 1. Training |
| 2. Business Contingency  Plan | 2. Define  Roles | 2. Install  Software | 2. Cost-benefit  analysis | 2. Maintenance  and support |
| 3. Arrangements for  hardware and software  Installation | 3. Migration  Protocols | 3. Convert  Data | 3. Validation | 3. System  Retirement |
| 4. Data Conversion to new  system | 4. Schedule |  | 4. System  migration |  |
|  | 5. Validation |  | 5. Reports |  |

**Business Contingency Plan**

The business contingency plan for the newly developed and much-anticipated system for the South Dakota Department of Labor, Workers’ Compensation Division, is as follows: Since the newly developed software system is hosted on AWS (Amazon Web Services), the worst-case scenario possible that could occur is an outage on their side. The contingency plan for this outcome will show an error/system is down message until resolved in the South Dakota Department of Labor’s governmental website, since this is where the user (claimant) creates an account, logs in, and upload medical claim files. In the case of this issue, users can still call and contact the Workers’ Compensation Division’s office to inquire about claims status. The architecture design was structured in a way that clerks use a software-based program installed in their office computers, which creates backup files in case of a system malfunction, or the website is down. Additionally, the business contingency plan has to account for the clerks’ site being down. If the website functions properly, users can still upload medical files. Clerks will have to wait until the issue is resolved. Meanwhile, all documents submitted by users will remain in AWS’s repository until the issue is resolved. Moreover, if both the website and installed program fail, the Workers’ Compensation Division’s office will have to resume business following their old business model (paper filing system) until both problems are resolved. This will allow this office to continue operating normally with the intent to eventually do a system data entry to have everything digitalized. Lastly, as a concern to knowledge being transferred, it is best during the training aspect of the transition phase to cross-train IS professionals among programming teams. This will ensure knowledge of the newly developed system is not lost due to changes of jobs by personnel, and that multiple individuals have the expertise to interpret and understand the system.

**Personnel Training Plan**

The personnel training plan for system users, clerks, and IS team personnel is simple. For users, it is best to create short and simple instructional videos with step-by-step instructions. Since the architecture design of the system stated users (claimants) will use the South Dakota Department of Labor’s governmental website, there will be a section under their account homepage with instructional videos to guide them step-by-step. These videos will have instructions encompassing procedures, how to upload a file, and what to do after a file is uploaded, among many others. For clerks working at the South Dakota Department of Labor’s office, the training plan will be more involved. Dennis et al. mention “the more radical the changes to the business processes, the more important it is to ensure that the organization has the new skills required to operate the new business processes and supporting information system” (2018, p. 425). First, a series of classes will be given by the programming team/operations group in charge of developing the system. Second, an instructional manual will be created with quick instructions for various tasks to serve as a guide. Third and going along with the maintenance aspect of the system, a chat room (similar to IT support) will be created to support future questions or encountered problems. The combination of all three tools should create a good understanding for clerks to successfully do their job. Lastly, the personnel training plan for the IS programmers involved in the development of this system will be to cross-train. Again, this will ensure knowledge of the newly developed system is not lost due to changes of jobs by personnel, and that multiple individuals have the expertise to interpret and understand the system.

**System Support/Maintenance Plan**

As stated, much of the system support will be given by the IS programming team involved with the development of this software system and the operations group. An instructional manual with quick instructions for tasks, frequently asked question section in the South Dakota Department of Labor’s office, short instructional videos, and a chat room (on-demand training) are to be created. For the system maintenance plan, problem reports and change request forms will be filled out by any management authority in the South Dakota Department of Labor’s office with detailed information to let the project manager in the IS group (myself for this course’s purpose) know of the problems at hand, to eventually be fixed, enhanced or redeveloped differently. Additionally, maintenance intervals of six months will be scheduled to do system updates including Java and Windows versions. This will ensure the system continues to operate efficiently as new versions come out. There is no need to worry about maintaining data stores since the development of this system uses cloud computing. AWS (Amazon Web Services) will take care of data store maintenance.

**Problem Reporting and Handling Procedures**

Problem reports and change request forms will be filled out by any management authority in the South Dakota Department of Labor’s office with detailed information to let the project manager in the IS group (myself for this course’s purpose) know of the problems at hand, to eventually be fixed, enhanced, or redeveloped differently. There will be monitoring and logging functionality in the developed system to capture errors. Users will be encouraged to report errors via phone or chat room, a feature necessary in the developed system. Through the monitoring and logging functionality, the IS programming team/operations group will be able to know if there are any errors/problems with the system. They will prioritize the problems, place them in a backlog, and fix them as time and capacity allow. Through the reporting of problems by the user via phone or chat room, the project manager will create tasks for errors/problems to be fixed. This will be added to a backlog and the previous processes will be repeated.

**References**

Dennis, A., Wixom, B., & Roth, R. M. (2018). *Systems Analysis and Design* (7th ed.) [E-book]. Wiley.