Vision and Scope Document
for
Capstone Insurance Company

Information Systems Migration Project

Version 3.0 Final

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ITEC 495

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Business Requirements

Capstone Insurance Company provides nationwide insurance coverage for their customers. They have a corporate office in Columbus, Ohio and office locations nationwide. The company has operated on a technical platform that has reached its technical limits in providing service for their customers.

The company is currently operating with Microsoft Windows 95 machines that connect to the corporate office with serial and telnet connections. The system has been in use for over 5 years and has become obsolete and not able to meet the existing demands. The system and customer requirements have continued to grow over the past five years. A complete system upgrade is required to provide new capabilities and improve customer services for today and for the next several years. The system will need to provide the necessary speed to access data efficiently as well as provide features that provide for customer requirements. Requirements include remote access capability for customers to access their accounts for billing, provide access to existing policies and to provide the ability to receive a quote on-line without direct contact with an agent.

1. Background

The Capstone Insurance Company is an insurance company that has sales, collections, claims and policy sections within the Corporate Headquarters. The corporate headquarters hosts the database and customer information while the remote offices have access to corporate remotely through serial and telnet connections.

The company has legacy applications throughout corporate and remote locations. The primary desktop operating system is Windows 95. The systems are becoming difficult to support and has been a major support issue that is increasing support costs dramatically. The support costs and ability to grow the business are the main motivations to perform the upgrades and migrations. The legacy applications that are currently used include console and hyper terminal connections that are both serial and telnet based applications. The Windows 95 clients are continuously locking up and affecting productivity and creating a major frustration for the entire company. Funding to migrate to an upgraded Windows platform has been investigated, but the cost of licensing is a real issue that would cut into operational funds. The licensing concern is also that the company may be considered an application service provider which also requires additional costs in licensing structure that was not even considered during the investigation.

Migrating to a Linux based operating system is a viable solution, but must happen efficiently and expeditiously as the existing systems are end of life and a solution is required immediately.
2. Business Opportunity

Capstone's existing infrastructure is at end of life and is failing to meet the needs of the company and its customers on many levels. In order to meet current and future needs, the system must be updated to support the enhanced customer and business needs. The main OS in use is Microsoft Windows 95. The systems were adequate at one time, but existing requirements have taxed the system to the point of imminent failure. The existing system utilizes a main office system where the remote office locations access the database through serial and telnet connections. The system is limited to text and has a limited speed to provide data. Downtime has become an issue that has significantly increased operational costs for support and system management. The average downtime is approximately 25 minutes per week for each system.

The systems and architecture being proposed will allow the remote locations access to the corporate office with updated systems using web browsing and provide visually pleasing output. The systems will also provide a much simpler configuration and allows for much greater security and features than the existing systems. The proposal is to provide Linux operating systems, and open source applications, where possible, for all application requirements as well as the upgrade of existing desktop hardware throughout the company. The proposed changes will allow Capstone to meet the needs of the business and its customers now and in the future.

3. Business Objectives and Success Criteria

Capstone Insurance Company has reported data that existing systems require 25 minutes of support per week. A single remote location averages about 6 systems. This equates to approximately 150 minutes of support per location per week. Currently the support system is responsible for 100 locations throughout the nation. 1500 minutes per week is 25 man hours per week just in maintaining the existing system. The goal of a new system would lower the support man hours per week to less than 5 hours. This will provide a significant cost savings in resources of manpower and the support requirements that are associated with maintaining the existing architecture.

The new software and hardware systems that are being proposed will have a large impact on lowered support costs and return on investment. Remote offices will be able to handle customer transactions in seconds rather than minutes improving efficiency and customer satisfaction. The existing systems present challenges that are becoming rapidly becoming frustrating for the remote office employees and customers alike. This is adversely affecting employee morale and customer confidence to a large degree.

Measurable Objectives
1) Reduce support calls by 60-75%, following training and an appropriate adjustment period to be determined
2) Improve performance accessing the corporate office database by 70% (Lowering response times to the database)
3) Provide upgraded desktops running a Linux Operating System saving $300 per computer compared to other Operating Systems
4) Successful transition to FOSS applications, such as Open Office, and others where appropriate and applicable.

4. **Customer or Market Needs**

Customers of Capstone Insurance Company are expecting decreased response times and enhanced web services, i.e. Access to account information, On-line payments, and other services via the web. Web services have become a standard in the insurance industry, as well as many others. In order for Capstone to maintain market share and continue to grow, this must be addressed. This information was collected during recent surveys over the past year and reflects the need to update the information systems to meet existing and future requirements.

The existing infrastructure has no ability to provide efficiently or securely any of the requirements that have been made from customer requests. The proposed system will not only meet existing requirements but will provide the ability to increase functionality and provide updated software and applications that improve services, efficiency and customer satisfaction.

5. **Business Risks**

The migration to a new system will require the documentation of business risks to Capstone Insurance Company. Training during the system migration is crucial in that a new system will be deployed and customer support calls will greatly change. Support of the new and existing systems is crucial to the migration and can be achieved with proper training of existing staff and providing communication to employees on the changes and how they will be affected. Providing positive information and access to training is very important in any migration and especially important with this company and their support structure.

The existing desktop OS platform is Microsoft based, utilizing Windows 95 in most cases. The change of platform presents many risks, including but not limited to, the following main risks:

1) Employee Resistance- A negative reception on the part of the employees will have a severe affect on project success
2) Downtime due to Staff training, and adjustment- The amount of time needed to implement the changes and train staff on new system can vary from minimal interruption to a large outage. Downtime will also be affected by other factors.
3) Change in OS platform is all encompassing in nature- Once the implementation has begun, rollback is made more difficult due to the essential nature of the change. A viable rollback solution will be needed to address this.

Several risk areas are of concern including training, support, costs, alternative solutions, updated software and resistance to change.
2. **Vision of the Solution**

The vision of this solution is to provide efficient access from remote locations to the corporate office to meet customer requirements. The requirements of the customers and remote locations are efficiency, accuracy and timeliness.

1. **Vision Statement**

The purpose of the upgrades is to improve connectivity and drastically lower support costs. Existing support has increased dramatically as the reliability of the existing information systems have deteriorated. The vision for the system migration is to correct the support issues and lower costs while providing new features. The migration to a web accessible system provides abilities that are not possible with the existing antiquated system.

2. **Major Features**

1. An operating system that is not out of support and supports many of today's new application.
2. Upgrades to the newest versions are free.
3. The new system of communications will support web access for users to access remotely.
4. The new system will allow access to the databases at the main facility with full GUI capablities, as opposed to the old system that only allows text.
5. Less time and money spent on maintaining an old system will allow for better business efficiency.
6. The new system will be faster, allowing current employees to be more productive.

3. **Assumptions and Dependencies**

It is assumed that the Linux will continue to be freely available so that the company will be able to use it without going over on costs. It is assumed that the locations of the business and its branches will be able to receive the needed internet services, for example ISPs. Databases and software to access those databases will need to be developed to access the data on the new systems. The assumption is that software exists and can easily be migrated to from the current system.
3. **Scope and Limitations**

Capstone is in need of a major infrastructure and systems upgrades in order to compete and grow as a company. This project will migrate all desktop systems to new hardware and Linux OS, including Open Source applications where applicable. The current connection vehicles will be maintained, telnet and serial, though more efficiently through improved hardware. Staff training and acclimation is integral to the success of this project and as such is a major component. The components will be implemented in stages based on dependencies. All changes to the scope of this project must be submitted in writing/e-mail to be reviewed by the change control board. The change control board will evaluate each request for relevance to the project, budget, and more. The decisions of the change control board are final.

1. **Scope of Initial Release**

Initial release of the upgrade will provide hardware and operating systems for the remote and corporate offices. This will enable the long term improvements and allow for the systems to access the new systems as they are migrated. The upgraded hardware will still access the systems in the same manner as the existing systems through telnet and serial connections, but the new hardware will improve efficiency and immediately lower support costs. Additionally, preliminary training sessions designed to acclimate the users to the new systems will began with the initial release. The order of training to be determined by the level of expected change for each position.

2. **Scope of Subsequent Releases**

The staged evolution of the upgrades will happen with a phased approach. The first phase will provide updated hardware and operating systems to corporate and remote locations. This is inclusive of new hardware installation, testing and training for affected employees. The second phase will be a database upgrade improving functionality and improving efficiency. The current DBMS being used for the majority of Capstone's databases is Oracle. That will stay the same. The third phase will provide a graphical front end to the database using web browser functionality. Examination and changes will be made to the GUI front end to improve the functionality and appearance for users. The fourth phase provides a backwards compatibility to the database, but also provides a new feature rich application to improve existing queries and provides for additional features and future database upgrades.

3. **Limitations and Exclusions**
This project was designed to address the specific needs of Capstone Insurance Company with regard to the upgrading and migration of all desktop systems to a Linux OS platform. All items that are not directly related to this task, as stated in the Vision and Scope statements, are excluded from consideration as a part of the project. Support will be continued for a period of ? after finalization of project.
4. **Business Context**

There is definitely a need to upgrade the current network infrastructure of Capstone Insurance Company. This upgrade will address the issues related to current structure and will provide the improvement and maximizing efficiency so Capstone Insurance can provide better service to internal and external clients.

<Note: replace this introductory paragraph with an introductory paragraph of your own. This section summarizes some of the business issues around the project, including profiles of major customer categories, assumptions that went into the project concept, and the management priorities for the project.>

1. **Stakeholder Profiles**

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Major Value</th>
<th>Attitudes</th>
<th>Major Interests</th>
<th>Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Users</td>
<td>The upgrade will provide more</td>
<td>Willing to try,</td>
<td>Good performance, stability, consistency</td>
<td>Training of new</td>
</tr>
<tr>
<td></td>
<td>improved system to individuals to</td>
<td>ease of use</td>
<td>with the operating system/desktop environment,</td>
<td>system.</td>
</tr>
<tr>
<td></td>
<td>perform their routine tasks</td>
<td></td>
<td>interoperability with other clients Good performance,</td>
<td></td>
</tr>
<tr>
<td>Developers</td>
<td>Honoring existing standard</td>
<td>Cautious</td>
<td>stability, consistency with the operating system/desktop</td>
<td>None identified</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>environment.</td>
<td></td>
</tr>
</tbody>
</table>

- improved productivity
- reduced rework
- cost savings
- streamlined business processes
- automation of previously manual tasks
- ability to perform entirely new tasks or functions
- conformance to current standards or regulations
- improved usability or reduced frustration level compared to current applications

## 2. Project Priorities

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Driver (state objective)</th>
<th>Constraint (state limits)</th>
<th>Degree of Freedom (state allowable range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule</td>
<td>Must be finished on time. The pilot must be available for initial testing by 1 November. Version 1.0 by 15 November and final solution by 1 December</td>
<td>Ensure that existing system is operational and not affected by upgrades and new solution</td>
<td></td>
</tr>
<tr>
<td>Features</td>
<td>Will provide enhanced UI to external clients and restricting access based on the individual user accounts.</td>
<td>All features must be fully operational.</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td>All security tests must pass; all functionality test must pass</td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>Developer team consist of Robert Smith, Neeraj Kaushal, A.J. Baznik-Wilson, Donald Picard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td>budget overrun up to 15% acceptable without executive review</td>
<td></td>
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</table>

## 3. Operating Environment

The operating environment of Capstone Insurance Company is nationwide. The company maintains a corporate headquarters where the database is controlled and limited access is provided to the remote locations and offices. The remote locations and branch offices cover all
the time zones across the United States and will have an impact on how the migration will occur to ensure that communication is provided and working hours are taken into consideration during any phased portion of the migrations. The remote offices will require access to the database during their normal work hours which will be from 9AM to 5PM daily from Pacific to Eastern Time Zones.

Response times to the data are critical in that customers expect to receive feedback immediately. Customer inquiries must be able to be completed within seconds and any queries longer than a minute will cause frustration and poor feedback from our customers. Connection outages are not acceptable for this business and safeguards will be required to ensure that alternative methods of access are available during any type of extended network outage. The corporate headquarters access to the network is extremely critical as an outage at the corporate location would render the remote locations useless without the ability to access the corporate customer database.
5. **Human Resources**

Timely completion of this project will be based on the project team’s ability to identify and correct issues as they arise. The inability to resolve issues on timely manners due to limited human resources may hinder in meeting the prescribed completion date.

1. **Team Charter**

Our team charter is to provide a viable solution for Capstone Insurance Company. Collectively making decisions via consensus. The team lead will be responsible for submitting deliverables.

2. **Technical Skills and Attributes**

<table>
<thead>
<tr>
<th>Name</th>
<th>Skills</th>
<th>Attributes</th>
</tr>
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<tbody>
<tr>
<td>Robert Smith</td>
<td>Network Engineering, Network Security</td>
<td>Team Player, detailed, structured</td>
</tr>
<tr>
<td>Neeraj Kaushal</td>
<td>System Analyst, Open Source applications</td>
<td>Curious, Team Player</td>
</tr>
<tr>
<td>A.J. Baznik-Wilson</td>
<td>Developer, Java Developer</td>
<td>Team Player, Task oriented</td>
</tr>
<tr>
<td>Donald Picard</td>
<td>Developer, Java Developer</td>
<td>Team Player, detailed</td>
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3. **Roles and Responsibilities**

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthony Baznik-Wilson</td>
<td>Developer</td>
<td>Responsible for development of company Web site and online claim review site for members.</td>
</tr>
<tr>
<td>Donald Picard</td>
<td>Developer</td>
<td>Responsible for development and management of web based member services.</td>
</tr>
<tr>
<td>Neeraj Kaushal</td>
<td>System Analyst</td>
<td>Responsible for deploying and managing application servers.</td>
</tr>
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</table>
4. **Communication Strategies**

The communication strategies of our team include email, instant messaging and Franklin Live. Google Documents is currently being considered for our communications and document continuity.
6. **Project Management**

1. **Deliverables**

   Google Documents is one of our recommended tools to provide to the customer and instructor. Google documents provides for revision control and allows for easy sharing within team members. Quality will be measured by reviewing each others work and collectively reviewing and approving the documents.

2. **Dependencies**

   The project will be completed in phases.
   The first phase will need to be the infrastructure survey and upgrade. All infrastructure that needs to be upgraded first to prevent down time after the new computer equipment is installed.
   Before the new computer equipment is deployed it is important that employees have received training on how to use the new equipment since it will be vastly different than the way it is now.
   Phase two will be the database and server migration at the headquarters location. The Database will need to be migrated and updated regularly until the new computer systems are put in place at the sites.
   Once a day the migrated database will be updated to match the current working database until cutover is completed.
   Phase three will be the deployment of all the needed equipment with applications installed on them for the employees to use. This will consist of a Linux based work station with database access via a web based application on the headquarters' servers.
   The last phase will be clean up and remediation of any issues that arise unexpectedly.

3. **Schedule**
7. **Educational/Program Outcomes**

The educational objectives of this project are to work as a team, increase our knowledge in group collaboration, and to experience the process of presenting a project plan and the implementation of the project plan. Our team is focused on working together as a team and sharing our knowledge. We have collaborated our ideas for the initial project plan and learning the best methods to perform online updates. So far, we have relied on email and Google Documents. The outcome of this project will be a greater understanding of project plans and how to implement.

This project will have many benefits to our team. The following are the outcomes that we are expecting.

1) Increasing our ability to communicate effectively as a team
2) Apply critical thinking during the entire project
3) Work together as a team to construct a viable network design
4) Develop strong management of information systems
5) Develop Systems Administration experiences
6) Incorporate strong Security mechanisms into the project
7) Employ a viable project that could be utilized for a true corporate project

1. **General Education**

This project will provide a great deal of education to our team. The first criteria is to increase our ability to effectively communicate ideas. The team collaboration through information systems will greatly assist with this first goal. The effective use of email, tasks, calendar, website and online document collaboration provides excellent learning for our team as a whole. The next goal is the ability to apply critical thinking during the entire project. The project has only begun, but we have already worked through some critical thinking and applied those ideas and knowledge to the initial project. The third area of education is the ability to construct a viable network design as a team. Developing strong management abilities of information systems will also be evident and increased during our entire project. Systems administration abilities will be required and grown during the implementation and testing of the project.

Incorporating strong security measures into the project is the sixth item within our goals for this project. Security is important for any company especially when dealing with customer's data and personal information. The project would not be declared a success without the incorporation of strong security controls and the ability to ensure authentication, authorization and confidentiality. The final goal of the project is to employ a viable solution that could be used for a real corporate project.
2. Information Technology

Graduates will apply network design to small- and medium-scale networks. Note, almost every IT project involves a network somehow; the network outcome will most likely apply to this project.

RESPONSE: This project requires the expansion of the existing networks. It also requires a migration from a serial and telnet connection to a web based application. This application while being much more user friendly will require updated network infrastructure and the ability to provide web servers on the internet for customers to access their information remotely over the internet.

- Graduates will apply foundations of management information systems to redesign and reshape organizations through the information systems that support them. Note, almost every IT project requires executive-level sponsorship; the MIS outcome will most likely apply to this project.
- Graduates will practice effective systems administration and automation techniques. Note, almost every IT project requires a server or disaster recovery plan; the systems administration outcome will most likely apply to this project.

RESPONSE: This project will rely heavily on systems administration and automation techniques. It is crucial that the proposal and implementation have the necessary disaster recovery processes documented to fulfill business requirements. The disasters during a migration would be detrimental to the company and require the necessary plans to be documented to handle such emergencies. The plan of migration will take in consideration that both systems will be required to be operational throughout. This will facilitate access and ensure that each system can access the data without compromising access by any company employees. The company must continue to operate during the migration and any level of outage would have detrimental results to their company and customer satisfactions.

- Graduates will apply current industry practices to the assessment of information systems in order to prepare, implement, and maintain security plans. Note, almost every IT project has some security consideration; the security outcome will most likely apply to this project.

RESPONSE: The security requirements of this plan are evident in every aspect. As the data is moved closer to the customer through the internet more security
concerns are evident. The existing database and migration will require the
necessary safeguards and security controls in place to ensure that only those that
require access are provided access. Elevated rights to the database will need to be
restricted and approved by the project manager. The database security and
integrity is crucial to the Capstone Insurance Company and a requirement for their
company.
8. **Annotated Bibliography**

**REFERENCES**


Taylor, M. (2009, April 07). The true cost of migrating to open source. ZDnet UK, Retrieved from http://resources.zdnet.co.uk/articles/comment/0,1000002985,39635251,00.htm


