# Feasibility Analysis

## **Executive Summary**

The purpose of this project is to provide a company-wide tool for calculating and designing salary analysis and performance reviews for supervisors and eliminating the need for manual paperwork. First and foremost, the scope of the project will remain strictly within the bounds of performance review calculations, communication, salary projection records, and salary actual records. Second, salary changes may result from promotions or performance reviews.

The project deliverables include data models regarding the flow of data within the system, the process models for the project, and the User Interface Design and documentation. We are executing this project because the new salary management system will vastly improve upon the current system. The new system will assist in the planning and calculation of salary changes and will also track projected salary, actual salary, and employee performance. This will aid Federated Insurance in managing workers' salaries while also keeping each department within budget. This project will attract and engage upcoming talent and current employees by competitively compensating them and awarding good performance. This will help achieve our mission and strategy by leveraging experienced and talented staff for customer service and innovation while continuing to provide excellent service at a manageable cost.

## **Operational Feasibility**

### System Effectiveness

The system will be implemented companywide to address the needs of supervisors and executive managers for performance and salary management. One way it will remain effective is through continued maintenance. The previous legacy system was unable to continue maintenance because its objectives were outdated. The new system will require addressing future business needs in order to maintain serviceability and the scope of the business. The qualifications necessary for effective use of this system include the following:

First, the system must ensure adaptability including changing annual salary percentages; the system will need to allow maintenance for future changes. Second, performance reviews will require accurate calculations during the rating process. Third, security controls and notifications are required for limiting managerial accessibility. Last, users including upper management and department supervisors should be involved in the development process so the system can function in different environments depending on the user.

### Project Support

The project will be well favored by management because it will save time and company resources. The current process of manually signing performance reviews cost valuable time for supervisors because of needed signatures and physical labor. The new process will limit the resources necessary for permissions and allow remote communication for rapid review. If there are change or issue requests, they will be documented at the start of the project and be considered by the development team for approval or denial. The project will support the mission of the company by providing more information to employees and improving the salary markers for employees.

### Workforce Reduction

Interns would have the risk of losing part of their internship if the project is completed early. Furthermore, the reduction of manual labor and paperwork would result in less time spent in that area and less need for work. Nevertheless, a direct connection between this project and a workforce reduction is limited. Further studies upon the completion of this project will be necessary for understanding affected results. It is expected employees in the workforce will be diverted to focus on other tasks instead of turning to immediate layoffs. Several users are managers and directors of departments who carry other responsibilities. The project will allow them to focus on other areas and create time elsewhere.

### Training

The new system may require additional training for internships and new employees. Part of the process is developing a database with employee information and automating the system to create performance review and salary range calculations. Application developers, database administrators, specialists for analysis, application designers, and business partners will be needed to carry out these tasks. If there are insufficient employees for the project, additional hires are needed, and as a result, more training is required.

If more training is required, the company is prepared to cover the costs and the time necessary for covering the scope of the project. There are very minimal hires requested because most of the positions are already filled. However, depending on the experience of these employees, they may need more training so they can finish their tasks successfully. If any interns are allowed to join the program, they will also require educational services.

### Operational Change & Performance

As the system development process ends, there will be a period of transition from the current system to the new system. Data from documents will be transferred to the new system database. This should not adversely affect employees, but it could reduce the availability of their salary actuals during this transition. Once this process is completed, employees will have more efficient access to their salary information. Managers will spend less time requesting approval and filing documents with performance reviews.

Employees will be able to view their salary actuals and salary information within the last five years. They will no longer be able to view projections by managers. This will positively affect their performance within the company because they know their salary may improve in the future as a result of incentives. A more efficient approach to salary outweighs the costs of switching to a newer system because it reduces long-term costs and time expended for performance management.

### Risk Mitigation

Project cancelation or delay may result in employees questioning the priority of their company, which may cause an injured relationship between both parties.

This project will conflict with other priorities such as day-to-day tasks and mission-critical projects. It is imperative that employees are used sparingly for the project so more important applications are focused on.

Salary actuals must be submitted at least 3 weeks before the effective date of salary increases. The Minnesota Wage law requires at least a 3-day notice to employees before an effective change in salary.

## **Technical Feasibility**

### Resources

The system requires hardware including pcs, monitors, accessories, and data storage. Software includes a DBMS, the knowledge base for the system, anti-virus software, firewalls, and controls. The company can pay for these technologies if they can cover the costs of the database management system. The rest of the resources are simple to obtain, the DBMS needs modeling and more time. The company could also use the existing RDBMS and expand it to meet their goals in salary and performance management.

The company has technical expertise as several of the supervisors are experienced with similar projects completed in the past. Nevertheless, there might be additional expertise required for specific tasks such as database management and application development. Managers who have a general expertise in technologies are also needed for the project so they can direct which requirements are needed to complete a task.

### Capacity Planning & Expansion

* Does the proposed platform have sufficient capacity for future needs? If not, can it be expanded?
* Will the system be able to handle future transaction volume and company growth?

The design for the system takes into account future needs for the organization and the goal is to provide a system life cycle of 15-20 years. If the system requires maintenance after that time frame, it will be designed to meet future requirements such as salary rates. The goal is to limit the time required for updating this system in the future and allow for long-term operation. Current estimations from corporate suggest current traffic for the system would begin at 400-500 users at one time. The growth rate for this number would increase four to five percent each year. Using these estimations, the system must prepare for around 1100 users at a five-percent growth rate if they are to continue operation for up to 20 years. Users could request additional features if there are issues or improvements suggested in the future. Overall, the system has the requirements to handle future traffic volume and company growth in the future.

### Prototype

* Will a prototype be required?

A prototype will be required in this project.

A prototype will support the development of the system because this project is directly working with users. It will provide feedback from users about if they agree or dislike certain features. A prototype will help ensure the needs of the stakeholders are met. Although this phase would require additional time to create a working prototype, the benefits would be substantial for improving the success of the system.

### Performance & Reliability

* Will the hardware and software environment be reliable? Will it integrate with other company information systems, both now and in the future? Will it interface properly with external systems operated by customers and suppliers?
* Will the combination of hardware and software supply adequate performance? Do clear expectations and performance specifications exist?
* The environment will be reliable because it will be tested by specialists once the design process is complete. There will also be a working prototype included in the design phase to reveal if users think the system is reliable, or rather, if they desire change. The performance review and salary management system will interact with HR systems by receiving data from their system, and, in turn, sending output back to the HR system. This data may include past transactions with salary actuals, and output to the HR system may include salary actuals for what to pay employees.
* The system will be unreliable with external systems as it is designed to operate within the confines of the business departments.
* This software is designed to operate on multiple types of hardware including PCs, phones, and tablets, and across multiple operating systems including Windows, MAC, and Linux. The variety of devices may impact performance slightly because of network traffic. This should not be a problem unless traffic exceeds the maximum network specifications.
* No clear specifications for software exist at this time. The network capacity must exceed 1100 users.

## **Economic Feasibility**

### Economic Feasibility Summary

* Do the projected benefits of the proposed project out-weight the estimated costs (total cost of ownership)? To determine TCO, the analyst must estimate costs in each of the following areas:

The TCO is upwards of $220000. The projected benefits would outweigh the costs over time because of less labor required, potential losses through risk in security, and employee shortages (due to competitiveness in the market) during periods of growth in the economy.

### Resource Costs

* Executive Sponsors – $8000-12000
* Project Sponsors - $8000-12000
* Project Manager - $8000-12000
* Account Manager - $8000-12000
* Application Analyst $8000
* Key Business Partners $1000
* Application Designer $10000
* Application Developer $10000
* Specialist (Overall project management) $8000-12000
* Specialist (Analysis) $8000-12000
* Specialist (Screen Design) $8000-12000
* Specialist (Testing) $8000-12000
* Specialist (Network Services) $8000-12000
* Database Administrator $13000
* Interns $6700
* Directors (high level users) $8000-12000
* Department Manger (Mid-level) $9000
* Supervisor/team lead (low-tier manager) $8000
* Office supplies $1000
* Outsourcing and Consulting - $12000

Estimated Total = $147000

### Hardware and Equipment Costs

* PCs to run software - $7500
* Accessories $1500
* Physical hardware to store data $7500
* Data Center Rental $1250

### Software Costs

* Including in-house development $4000
* Purchases from vendors $7500
* UX-UI Design $4000
* Cross-platform integration $8000

### Training Costs

* Average of $1252 per employee for formal training costs
* Peer-to-peer support may cost $600 per employee for estimated informal training costs

### Licenses and Fees

* Microsoft Teams/Project License - $1200 per additional license
* System upkeep/maintenance fees - $1250 a month

### Consulting Expenses

### Facility Costs

* Electricity fees - $8000 per month
* Facility Fees - $2000 per month
* Rental Space - $400 per square foot per month

### Lost Opportunity Cost

Time management - $12000

Office space - $4000

Hardware - $10000

Software - $15000

Licenses and Fees - $1000

## **Schedule Feasibility**

Schedule Timeframe

The project under review cannot be completed in an acceptable timeframe. Certain factors that affect schedule feasibility include a reasonable expected timeframe by giving enough time to complete the project, and at a fast enough pace to accomplish the business’s goals. Managers must reconsider the schedule because it is an unrealistic timeframe for completing the project within the current scope. If the schedule is dropped back a few months, at the earliest next May, then this is a reasonable timespan. Nonetheless, the IT team can control certain aspects of the schedule feasibility if they limit training requirements, finish project tasks under the expected duration, and communicate in a timely manner.

### Timeline & Risk Management

Management has concluded that this project must be completed by early November. However, there are very few due dates established by management for the actual timetable. Additionally, this timeframe is tight because there is less than two months until this due date. It is very unlikely that the project will be completed in such a short timeframe. If management desires to move forward despite this fact, perhaps twice the original number of employees will be needed. Furthermore, additional resources for the project including software with higher levels of features will be required.

An accelerated schedule could pose certain risks if tasks are not completed on time. Despite this project not being mission-critical, an accelerated program would be unacceptable to speed up the project before its official due date. There is not enough time to complete it currently and speeding up the schedule more would only allow for project failure.

### Project Management

Project management will provide a work breakdown structure in the form of a PERT chart designed to split the project down into specific, individual tasks. This will open the way for a critical path method, for estimating the length of each task so it will be completed on time. Another technique management will use is scrum meetings designed to create a team environment where managers can update team members on scheduling and in turn be informed about team members' progress.

A project manager will be appointed for this project because it is necessary for staying on track with scheduling. A project manager will provide insight for employees and appoint trustworthy team members to complete tasks.