**BUS TRANSPORTATION SYSTEM  
HUMAN RESOURCE 2**A Project Study  
Presented to the IT Faculty  
Bestlink College of the Philippines  
Quezon City, PhilippinesIn Partial Fulfillment of the Requirements for the Subject  
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**Table of Contents**

Table of Contents

**Project Background1**

Project Charter**1.1**

Type chapter title (level 3)3

**Type chapter title (level 1)4**

Type chapter title (level 2)5

Type chapter title (level 3)6

1. Project Background
   1. Project Charter
      1. Vision
      2. Objectives
      3. Project Size Estimate
      4. Project Complexity Estimate
      5. Scope
      6. Organization
      7. Resources
      8. Approach and Methodology
      9. Success Criteria
      10. Priorities
      11. Product Roadmap
      12. Assumptions and Constraints
      13. Risk and Issues
      14. Sign-off
   2. Project Plan
   3. System Architecture
      1. Business Architecture
      2. Application Architecture
      3. Data Architecture
      4. Technology Architecture
2. Product Backlog
   1. Product Backlog (User Stories) Table
   2. Product Backlog for EIS Information Security
   3. Product Backlog for EIS Standards
      1. UI/UX (icons, color, etc.)
      2. Messages
      3. Database
   4. Product Backlog for Integration
   5. Product Backlog for Analytics
      1. Application System Analytics
      2. EIS Analytics
3. Sprint Backlog
   1. Sprint Backlog Table
      1. User Stories
      2. Information Security
      3. EIS Standards
      4. EIS Integration
      5. EIS Analytics
   2. Sprint Burndown Chart (Signed by Product Owner)
   3. Sprint Backlog Output
4. **Project Background**

Provincial Bus Transportation Company is a business that provide a service to its customers by transporting people and packages from different destinations in the province through buses.

Human Resource 2 is a module of the Bus Transportation System Enterprise Resource System (EIS). Human Resource 2 is composed of Competency Management, Succession Planning, Learning Management, Training Management and Employee Self-Service.

Competency Management helps the organization in creating and defining the core, leadership and job. And also, identifies the required set of abilities and skills needed to enhance performance and achieve success.

Succession planning identifies and develops potential leaders that is able to succeed the outgoing and old leaders when the leaders leave, retire, or die. It also expands availability of experienced and capable employees that are able to take the accept these roles and responsibilities as it become vacant.

Learning Management is a process of arranging, disseminating and delivering learning materials, assignments, assessments, and track and calculate grades.

Training Management administers to the training curriculums, schedules, training delivery, grading, records and training history of the employees, and provides venues for the trainings whether in-house or public trainings or seminars.

Employee Self Service or ESS is a website-based system that provides the employees to access information; alter contact information, family members, and benefits.; and send request/s to the HR Managers and immediate Supervisor.

* + 1. **Project Charter**

**1.1.1 Vision**

Human Resource 2 is committed to provide a system that will deliver a reliable data in determining the employee’s development and competency for the Provincial Bus Transportation company.

**1.1.2 Objectives**

* To administer, document, track, report and deliver educational requirements for the employees
* To monitor the employee that will undergo and is undergoing the training
* To determine the employee that shows excellence and dedication for the company
* To provide an avenue for the employees to navigate employee’s information with confidentiality, security and accessibility

**1.1.3 Project Size Estimate**

The project will take up to 8 months from July 2018 to March 2019 to complete and release to the market for full operation. The cost will be about 400 Thousand to 5 Thousand pesos including the compensation of the development team, licenses of the applications, Bus Transportation System, utilities and other expenses that will be needed in the development of the system.

**1.1.4 Project Complexity Estimate**

The Human Resource 2 project is based on the standard process of the Philippines and must comply with the new Data Privacy Law that will provide security to the personal information of the employees. And the system must be in line with whatever law may passed.

**1.1.5 Scope**

Human Resource 2 focuses on identifying the able employees to replace the old employees that may leave, retire, or die; create and identify the core of the employee leadership, job descriptions and qualifications, and competencies in the market; providing an avenue for employees to know the right thing to be learned about the company, job description and others; developing the employees by allowing them to experience the learnings they’d acquire into actual practice and providing seminars that will put the best out of them; and providing an avenue for the employees to have their request automated, see payroll information, and see other information at the comfort of their homes through the ESS portal in the browser.

**1.1.6 Organization**

|  |  |  |
| --- | --- | --- |
| **ROLE** | **NAMES & CONTACT INFORMATION** | **RESPONSIBILITIES** |
| Project Owner | Dr. Rommel Constantino | * Serve as ultimate authority/ responsibility for the project * Provide strategic direction and guidance * Approve changes to scope * Identify and secure funding * Make business / approach decisions for the project * Participate in key activities * Make resources available * Approve work products, address issues, and approve change requests |
| Scrum Master | Nelson Dela Torre | * Report to and receive direction from sponsors * Manage, review, and prioritize project work plans * Provide status reports * Manage project team * Recommend changes, escalate issues, and mitigate risks |
| Development Team | Jefferson Almonte  Majirel Berino  Tom Cirs Beltran  Mark Baquir | * Participate in project activities, including planning, implementation of deliverables, and quality control |
| Stakeholders | Dr. Rommel Constantino  Mr.Jesryl Gondino  Mr.Leoned  Andrew Tumbaga | * Provide the idea to the research. |

**1.1.7 Resources**

* www.scholar.google.com
* https://www.unece.org/fileadmin/DAM/stats/publicati

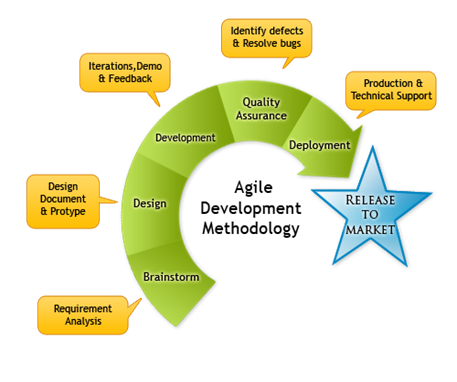
ns/HR

MT\_w\_cover\_resized.pdf

* https://www.hrpayrollsystems.net/employee-self-service/
* https://blog.commlabindia.com/elearning-development/learning-management-system-workflow
* http://www.cedma-europe.org/newsletter%20articles/LTI%20Mag/Understanding%20your%20Training%20Process%20(Sep%2005).pdf
* https://www.tbs-sct.gc.ca/gui/spgr/spg-gpgr-02-eng.asp?for=hrps
* https://blog.avilar.com/2017/11/20/integrating-a-competency-management-method-5-steps/

**1.1.8 Approach and Methodology**

Agile Scrum Methodology is a conceptual framework for undertaking software engineering projects. These are numbers of agile software development and sprint time box effort, is it restricted to a specific duration during each sprint, the team creates finished portion of a product.



**Brainstorm**

Brainstorming is a group creativity technique by which efforts are made to find a conclusion for a specific problem by gathering a list of ideas spontaneously contributed by its members.

**Design**

The creation of a plan or convention for the construction of an object, system or measurable human interaction Like business process, circuit diagram and serving patterns.

**Development**

A systematic use of scientific and technical knowledge to meet specific requirements.

**Quality Assurance**

Way of preventing mistake and defects in manufactured products and Avoiding problems When delivering solutions or services to Customers.

**Deployment**

Methodical procedures of introducing an Activity, Price, Program, Or system to all applicable areas of an organization.

**1.1.9 Success Criteria**

The following are the determining factors in considering that the finished subsystem of Human Resource 2 is a success,

* Integration of the data between the subsystems
* Completion date should be on the second week of February, 2019 or earlier the date indicated.
* Daily meeting with the development team with the questions
  + What are the challenges you encountered?
  + What did you do yesterday?
  + What will you do today?
* Once a month meeting or if necessary meeting with the project owner and stakeholders for additional inputs
* Completion of the project sprints and backlogs on the before the deadlines.
* Real-time update on what is going on with the system for the project owner
* Real-time update on the task completed by the development team for the project owner
* Can generate reports
* Produce Accurate dashboard data

**1.1.10 Priorities**

* Access levels for every user
* Account creation or registration for new system user
* Accurate dashboard with the database
* Generates graphs for each submodule and module
* Generates reports
* Reports saved to PDF format including the graphs
* Data integration

**1.1.11 Product Roadmap**

**1.1.12 Assumptions and Constraints**

All of the assumptions in the creation of the system, but being limited by other factors that will greatly affect the system.

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| **Assumptions** | **Constraints** |
| Twice a week consultation with the Project Owner/ Adviser | Full workload of the Project Owner/ Adviser |
| Project to be completed within two semesters | New methodology |
| Weekly meeting with the development team | Many class cancellations due to the weather |
| Great help from the Project Owner / Adviser | New Instructor to be the Project Owner/ Adviser |
| Document to have basis on the content to be inserted. | No available copy of the new document with complete content |

**1.1.13 Risks and Issues**

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| --- | --- | --- | --- |
| **Risk Factors** | **Probability**  **(H-M-L)** | **Impact**  **(H-M-L)** | **Risk Management**  **Action** |
| Technical Risk | H | H | Prepare backups in that will compensate with the technical risk |
| Calamity Risk | H | M | Complete planning of the task needed for the completion of the system. |
| Security Risk | M | L | Strengthening the security features that will only authorize the right person to use the system. |

**1.1.14 Sign-off**

Monthly Maintenance – To keep the system safety standards

Seminar – To get some ideas on how the system works.

Users – experts that can handle the actual system.

* 1. **Project Plan**

Provincial Bus Transportation System development will improve the integration and processes of the business. It also will help the employee’s workload through the system and website that will also cater the needs of the its customers.

The development duration of the system will take up to 8 months from July 2018 to March 2019 to complete and be available to be release to the market for the use of the business and will amount to 3 Million to 5 Million estimated cost for the overall development of the system.

* 1. **System Architecture**

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| **EIS Architecture** | |
| Business Process Architecture |  |
| Application Architecture |  |
| DateArchitecture |  |
| Technology Architecture |  |

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| --- | --- |
| **System Architecture** | |
| Business Process Architecture |  |
| Application Architecture |  |
| DateArchitecture |  |
| Technology Architecture |  |

* + 1. **Business Process Architecture**

Diagram that shows the procedures done in the business in order to attain a successful transaction and activity of the company.

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| --- | --- |
| Competency Planning |  |
| Succession Management |  |
| Learning Management |  |
| Training Management |  |
| Employee Self Service |  |

* + 1. **Application Architecture**

Diagram that provides the walkthrough of the system on what are the steps or processes in using the system.

* + 1. **Data Architecture**

Entity Relationship Diagram for the Human Resource 2 on how the integration of the data happens

* + 1. **Technology Architecture**

Logos of the applications, softwares, and hardware used in the development of the system.













1. **Product Backlog**

2.1 Product Backlog (User Stories) Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| User Story Number | User Stories | User Story Priorities | Requirement Reference | Revised Priority | Status |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |

2.2 Product Backlog for EIS Information Security

2.3 Product Backlog for EIS Standards

In order to create pan organized system interface, the development team created a template that does create uniformity in the system design or interface

2.3.1 UI/UX (icons, color, etc.)

2.3.2 Messages

2.3.3 Database

2.4 Product Backlog for Integration

2.5 Product Backlog for Analytics

2.5.1 Application System Analytics

2.5.2 EIS Analytics

**Chapter 3**

**SPRINT BACKLOG**

**3.1 Sprint Backlog Table**

**3.1.1 User Stories**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **User Story Number** | **User Stories** | **Tasks**  **(1…..n)** | **User Story Points** | **Responsible Team Member** |
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**3.1.2 Information Security**

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| **IS Number** | **IS Description** | **Tasks**  **(1…..n)** | **IS Points** | **Responsible Team Member** |
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**3.1.3 EIS Standards**

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| --- | --- | --- | --- | --- |
| **Standard Number** | **Standard Description** | **Tasks**  **(1….n)** | **EIS Standards Points** | **Responsible Team Member** |
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**3.1.4 EIS Integration**

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| **Integration Number** | **Integration Description** | **Tasks**  **(1….n)** | **Integration Standards Points** | **Responsible Team Member** |
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**3.1.5 EIS Analytics**

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| --- | --- | --- | --- | --- |
| **Analytics Number** | **Analytics Description** | **Tasks**  **(1….n)** | **Analytics Standards Points** | **Responsible Team Member** |
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**3.2 Sprint Burndown Chart**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sprint 1 Backlog** | | | **Sprint 1 (2 Weeks)** | | | | |
| **Product**  **Backlog Item ID** | **User Stories**  **(Features)** | **Initial**  **Estimate** | **Day 1** | **Day 2** | **Day 3** | **Day 4** | **Day 14** |
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|  | **Total Effort** | **80** | **70** | **60** | **50** | **30** | **10** |
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| **Sprint Burndown Chart** | | | | | | | |

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| **Sprint 2 Backlog** | | | **Sprint 2 (2 Weeks)** | | | | |
| **Product**  **Backlog Item ID** | **User Stories**  **(Features)** | **Initial**  **Estimate** | **Day 1** | **Day 2** | **Day 3** | **Day 4** | **Day 14** |
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|  | **Total Effort** | **90** | **70** | **40** | **30** | **20** | **5** |
|  |  |  |  |  |  |  |  |
| **Sprint Burndown Chart** | | | | | | | |

**3.3 Sprint Backlog Output**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Number** | **Task Name** | **Output** | **Test Result** | **Accepted by Product Owner** |
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