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Case Study: Ice Breaker

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WEBD2012 BUSINESS REQUIREMENTS GATHERING & DESIGN

Assignment 1 Case Study: Ice Breaker

Part 1: Basic Analysis

1. Goal and Scope

A goal is a short, quantified statement of what the product is intended to do and what benefit it brings to the business. The Ice Breaker project aims to develop a system that uses data from the environment to predict when ice will form on roads and schedule trucks to treat the streets with de-icing material before they become dangerous.

The scope of the work for the project includes everything that needs to be done to make this goal happen, such as predicting when the ice will form, scheduling trucks, and ensuring the roads are safe. The project team is responsible for understanding and setting the scope of the work so they can gather the correct information and make the best product possible.

2. Stakeholders

The stakeholders in the Ice Breaker project are the people with a vested interest in the project's success. These include:

- Northumberland County Highways Department is the first customer and main system user. They are responsible for keeping the roads free of ice and have agreed to provide expertise and information for the project.
- Saltworks Systems is responsible for developing the Ice Breaker system.
- Vaisala provides knowledge, data, weather forecasting agencies, and road de-icing equipment suppliers.
- Weather forecasting agencies providers of weather forecast data for the Ice Breaker system.

These groups all have a role in ensuring the project succeeds and requirements are met.

3. Sponsor

The sponsor of the Ice Breaker project is likely to be the Northumberland County Highways Department because they are the first customer and primary users of the system.

4. Customer

The customer for the Ice Breaker project is the Northumberland County Highways Department.

5. Constraints and risks:

Constraints are restrictions on the scope or style of the product. These items include predetermined design solutions that must be used, constraints on changing how business processes are currently implemented, and the time and money available for the project.

- Cost: The project must be completed within budget.
- Schedule: The project must be completed on time.
- Data availability: The system must be able to integrate data from various sources, such as weather forecasts and road temperature sensors.

Risks are potential problems that could happen during the project. Someone good at identifying and assessing risks will look at the project and identify the main risks. Some of the risks in this project include the following:

- The system's predictions of when the ice will form on roads may not be accurate if the weather forecast data is inaccurate.
- The system's predictions of when the ice will form on roads may not be accurate if the road temperature sensors are not working correctly.

- The system may not be able to send trucks to treat the roads with de-icing material if there are not enough trucks available.

Part2:Learning Outcomes

1. Describe the role of the project team members in the systems development life cycle

The project team members are crucial in the systems development life cycle. The systems development life cycle is a process that outlines the steps needed to develop a new system or software. The project team members will work on different stages of the SDLC, such as planning, analysis, design, development, testing, and implementation.

- The project manager will oversee the entire project, ensuring it stays on track, within budget, and on schedule.
- The business analyst, a key project team member, will be responsible for gathering and analyzing the requirements for the new system, such as the Northumberland County Highways Department and the end users, and identifying the specific needs the new system must meet.
- The developers will create the new system according to the requirements document.

Finally, the implementation team will be responsible for deploying the new system and training the end users on its use.

All project team members will work together throughout the systems development life cycle to ensure that the new system meets the needs of the stakeholders, is developed within budget and on schedule, and is of high quality.

2. Describe the role of a business analyst in systems development

The role of the business analyst is to work with the project team and stake holders to define and document the requirements for the system. This includ es identifying the project's scope and the customer's specific business nee ds (in this case, the Northumberland County Highways Department).

BA is responsible for gathering information from stakeholders, such as the Highways Department's expertise and knowledge of the current processes, and using that information to identify areas for improvement and define the req uirements for the new system. The BA will also create a context diagram to clearly show the work's processing responsibilities and the adjacent system s' responsibilities. Additionally, the BA will work with the project team t o identify any constraints or risks that may impact the project and ensure that all requirements are aligned with the project's goals and objectives.

The business analyst plays a critical role in ensuring that the final produ ct meets the customer's needs and achieves the desired business outcomes.