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Elicitation Report

Eliciting requirements is the crucial beginning step to making a successful product that will satisfy stakeholders and solve a common problem. Requirements elicitation will identify the needs and constraints for the stakeholders in a system. According to Wiegers Beatty Ch. 7, Requirements Elicitation, before doing elicitation techniques you must decide on the elicitation scope and agenda, prepare resources and prepare questions. These resources are goals, domain knowledge, identifying stakeholders, finding business rules, operational environment, and organizational environment. As the Weigers textbook mentions, elicitation isn't a one and done. It is a cycle that repeats since more and more requirements must be analyzed and taken into account. SWEBOK Ch. 1 Section 3 describes some of the general elicitation techniques. These techniques are interviews, scenarios, prototypes, facilitated meetings, observations, and user stories. Other techniques mentioned in the Wiegers textbook include workshops, focus groups, and questionnaires. While requirements are identified here, so are constraints. IEEE 29148 6.3.3.5 says constraints are a type of requirement that are imposed by external or organization stakeholders, external or enabling systems, or activities from other life cycle phases and technical activities. These technical activities can be Transition, Operation, and Maintenance. When making these requirements, MITRE Pg. 315 says requirements must the characteristics of being traceable, unambiguous, specific and singular, measurable, performance specified, testable, consistent, feasible, uniquely identified, design-free, and must use shall and related words. After these requirements are written, a wireframe, mockup, or prototype can be made to further elicit requirements and receive feedback from stakeholders to see if it meets their needs or not.

By creating use cases in requirements engineering, they help capture a system's behavior requirements by detailing scenario-driven threads through functional requirements as mentioned in MITRE Pg. 439. They describe how a user/actors will interact with the system and the user's interaction with other actors.

One of the most difficult challenges in requirements elicitation is conflicting requirements between stakeholders. As a BA, you want to make sure all the stakeholders are happy and have their needs met, but this becomes a problem when one stakeholder wants something that a different stakeholder doesn't want. There has to be a compromise between the two stakeholders. Another challenge of requirements elicitation is stakeholders or customers not knowing what they want. It's hard to elicit requirements when they are uncooperative or very vague in what they want. Lastly, another challenge is not being able to meet with all the desired stakeholders. This becomes an issue as their needs might not be met due to not meeting with them and executing some of the elicitation techniques with them.

I first met with my sponsor to figure out some of the stakeholders and business rules. The stakeholders I found were the owner, head chef, chefs, servers, salad makers/cashiers, and the supplier. I then figured out some of the business rules which were somewhat related to their issue:

- Rotate older items to the front and newer items to the back
- Save all alcohol containers for easier counting and tracking
- Wash all food items due to health and safety regulations
- Always close cooler doors and check temperature every couple of hours and log it
- Store items/consumables neatly and in the correct spot for easy access
- Check for expired items every day in freezers, coolers, etc.

I then sat down an **interviewed** my sponsor Robin Gorry briefly towards the end of their dinner service. I started off asking them how the system will help her to which she replied, "Having a good way to track our current inventory and ordering methods seems more safer and responsible than the current method in which we use today." I proceeded by asking how she would use the system to which she responded, "As a small business, I'm technically the manager. Seeing how employees interact with this new system and make sure they aren't doing anything bad is something I would look forward to." My final question was where she would use the system to which she replied, "It would be nice to have it in the iPads that we currently have but I would also love to use the system from home in case I can't be present here." I asked

to **observe** some of the employees and their coolers, storage rooms and current system. After a few minutes of **observations**, I saw that they had items nicely organized but they did not have any way to keep track of how many of each item they had. Employees would just take items as needed and go on with their day. I then proceeded to create some **user stories** by asking some of the employees what they would want the system to do for them. Here are the user stories that I came up with:

- As an owner, I want to see the actions of my employees to make sure they are using the system properly.
- As an owner, I want to receive a copy of the items ordered so that I can make sure the correct and necessary items are being ordered.
- As an owner, I want to view all my inventories remotely in case I can't use the system at the workplace.
- As the head chef, I want to be able to search up items to order in order to find them easier.
- As the head chef, I want to view the inventory at all times during the work shift to see what is and isn't available.
- As a server, I want to view how many types of drinks we have in house so I know what I can and can't give to the customers.
- As a chef, I want to be able to update the inventory item's sizes quickly when we are busy so that I don't waste a lot of time.
- As a supplier, I want to be able to receive a list of ordered items to my email to quickly process.