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Development of Systems for Processing and Managing Donations for the William A. Burnard Warming Center

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DEVELOPMENT OF SYSTEMS FOR PROCESSING AND MANAGING DONATIONS FOR THE WILLIAM A. BURNARD WARMING CENTER

by

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Abstract

Structure is important for any organization to have success and grow. Thus, having a good inventory system can make a huge difference. This project set out to investigate and develop a system that would be able to monitor incoming donations, inventory levels, and items given away to guests. The inventory method needed to be as automated as possible because the warming center volunteers were already busy with other responsibilities.

While many softwares were researched, my proposed solution was created with a combination of Google Sheets and Google Forms, as it is free and can be customized to the specific needs of the warming center. Given the title "William A. Burnard Warming Center Mastersheet," this inventory system would track donations and donor information, total inventory, current inventory, certain items given to guests, and weekly counts of the most commonly used items. A purely automated system was not possible given the circumstances, but this system can be considered a hybrid, with some items counted automatically while others need a manual count. The hope is that the manual counting was made simple enough not to place any additional burden on the volunteers.

Although this system is far from perfect, it will hopefully help the warming center find a future inventory system that will give them the organization and structure to further allow them to prosper as a new nonprofit organization.

Acknowledgments

First, I would like to thank Dr. Jayme Walters for agreeing to be my mentor and helping me learn more about nonprofit organizations, something I was unfamiliar with going into this project. There were some setbacks in finding the right solution for the center, and she was very patient and helpful throughout the process.

Second, I would like to thank Kara Bachman, a volunteer directing inventory and donations for the warming center. She helped me with every step of this project, and many of her ideas were used in the final product.

I would also like to thank Nicole Burnard, who helped create this amazing organization. Her efforts, along with the help of amazing volunteers, will keep guests warm on cold Logan nights for many years to come.

Finally, I thank my wife for helping me in every way possible during the busiest semester of my undergrad at Utah State.

In my time as an undergraduate student, I have become increasingly involved in volunteer work. I believe that it is important to give back to the community that has helped give me the opportunity to study here at Utah State. During a meeting I attended for the Christensen Community Scholars, we learned about a warming center that was being developed in Cache County. The presenter shared some very touching stories about working with the local homeless community. Having grown up in Cache Valley, I was appalled to hear about a problem that has been around me my whole life but one that I have been blissfully unaware of. I left the meeting feeling emotional and shared what I had learned with friends and family. Later, I met Dr. Walters, who helps run the William A. Burnard (WAB) Warming Center. The center did not have an inventory system, and this was identified as a need I could help out with for my project.

An inventory system is important for any kind of organization. Munyaka and Yadavalli highlighted the importance of inventory, noting that inventory can be as much as half of a company's expenses or even half of their total capital investment (2022). Companies understand how crucial inventory is, and there has even been an increase of over 525 percent in articles published on inventory management (Munyaka & Yadavalli, 2022).

The goal of this project was to research and create a system that could track incoming donations, current inventory, and items given to guests staying at the WAB Warming Center. Because the volunteers at the warming center were already very busy performing other tasks, the inventory system needed to be as automated as possible.

When it comes to tracking incoming donations, information such as item name, amount, date donated, and donor information are all important for future applications for grants and to know items needed moving forward. This information can get complicated when some items should be tracked individually (e.g., baby crib). At the same time, others are tracked by box,

which contain many items (e.g., Pop Tarts), and sometimes different boxes contain different amounts.

The current inventory portion of the system also had many complications when categorizing items. For example, a category can't be as simple as the number of shirts. The shirt could be short-sleeve or long-sleeve, range from size XS to XXXL, or be made for men or women. That in itself is 28 different categories just for shirts. Another problem with classification was deciding how specific to get with food when the donor could donate several different items that fulfill the same purpose. Should Goldfish crackers be considered different from Ritz crackers even though they both fulfill the same need?

The most challenging problem with the system's design was figuring out how to track what was used or given away. It is irrational to try and count every spoon or straw used, but then how were we supposed to know how many spoons we currently have? Some things could be counted, such as how many ramen cups were consumed at night. However, the volunteers already had enough responsibilities, so there wasn't time to count those things. It was, therefore, important to find a way to make the solution to this problem as automated as possible.

To start this project, I contacted and met with various established local non-profit organizations to see what kind of inventory systems they were using. I talked with The Family Place, the English Language Center of Cache Valley, and a couple of homeless shelters in Salt Lake City. They expressed similar problems to the ones previously mentioned, and none had an organized system to keep track of the items we wanted to account for. I tried researching various inventory apps that were available online, but they were all designed for businesses, and items were monitored through shipments received and sales made. This research revealed a void regarding inventory systems designed specifically for nonprofit organizations. This is probably

because the companies that design inventory management systems most likely design them for businesses, as there is a higher potential for profit in that sector. Desperate, I reached out on the social platform Reddit to see if anyone else had previously worked in a nonprofit organization similar to the warming center, and if so, what kind of inventory system they used. I didn't get a lot of responses, but one promising response mentioned there were inventory systems designed for food pantries. I researched several different food pantry software programs, and some of them had promising features, but we ultimately decided not to purchase any of them.

Without any great inventory systems available, I created a custom inventory system using both Google Forms and Google Sheets. There are limitations to using these programs, but it was a cost-friendly way to create an inventory system tailored to the needs of the warming center. As I am not a computer science major, plenty of YouTube tutorial videos exist on how to use many of Google Sheets' features and formulas. Kara Bachman, a volunteer directing inventory and donations for the warming center, helped me throughout the process, and many of her ideas were used in creating this system. The title of the system is "William A. Burnard Warming Center Mastersheet." It was created with Google Sheets and has an accompanying component in Google Forms. The Google Sheet is further divided into six different components. The first component is designed to record in-kind donations. When a volunteer goes to enter in a new donation, it will ask them for the item name, amount, date, donor name, donor email, donor phone number, donor address, if a donation receipt has been sent, if we've sent them a thank-you card, and additional notes. If the answer to the donation receipt or thank-you card box is entered as yes, the box will

turn green. Any other response will turn the box red to let us know further action is needed. An example of the in-kind donation sheet is shown below.

Figure 1: In-Kind Donations Page

The next part of the inventory system is labeled "Total Inventory." The total inventory counts how much we have received of each item and doesn't consider whether that item has been given away. The function of this section is to allow us to see how much we have received of a certain item in total. When a volunteer enters an item into the in-kind donation page, they will also add the quantity of the item received to the current number on the total inventory page. The inventory is split into the following categories: food, disposable products, cleaning supplies, office supplies, pet supplies, hygiene items, men's clothing items, women's clothing items, children's clothing items, other clothing items (e.g., backpacks, winter gloves, etc.), sleeping supplies, children's items (non-clothing), and miscellaneous. Between these categories, there are a total of 250 different items listed in the inventory. The total inventory is split into three columns: name of the item, the item's count, and notes. If any non-numerical character is entered

into the count column, its box will turn red. Additionally, putting the number zero, or any

negative number, for the count will also result in its box turning red.

Disposable Products:		
Coffee Cup Lids	1000+	
Coffee Cups	945	188 coffee cups onsite, 163 foam cups onsite, 594 offsite
Coffee Stirrers	5000ish	
Floor Cleaner		
Forks	1096	296 are offsite
Lint Rollers		
Napkins	700	
Paper Bowls	1496	998 are offsite
Paper Plates	503	204 are offsite
Paper Towels	54	47 are offsite
Plastic Cups		
Plastic Ziploc Bags (1 gal)	608	548 are offsite
Plastic Ziploc Bags (1 qt)	647	567 are offsite
Scrub Brushes	2	
Spoons	1396	600 are offsite

Figure 2: A Portion of the Total Inventory Page

Regarding the problems with categorization, we decided to group some items for

simplification. For example, the category "savory snacks" includes chips, crackers, and pretzels,

among others. The "sweet snacks" category includes anything from fruit snacks to cookies. We

also grouped things such as coffee cups, even though some might be slightly different sized (12

oz vs. 16 oz).

In addition to the total inventory page, there is a page for the current inventory. The

current inventory page integrates data from two different pages. The goal of the current inventory

page is to show how much of each item there is currently without the need for it to be updated by

a volunteer. Some miscellaneous items will need to be counted and manually added to the current

inventory page; however, most of it is automated, and the automated sections are locked from

users deleting the coded formulas. The items that need to be manually counted are marked with

an additional yellow box on the right side of the note section. The current inventory mirrors the

total inventory page in that it has the same categorization, and the amount boxes will turn red

with a zero or non-numerical entry.

Disposable Products:			
Coffee Cup Lids	1		
Coffee Cups	1		
Coffee Stirrers	1		
Floor Cleaner			
Forks	1		
Lint Rollers			
Napkins			
Paper Bowls	1		
Paper Plates	1		
Paper Towels	1		
Plastic Cups	1		
Plastic Ziploc Bags (1 gal)	1		
Plastic Ziploc Bags (1 qt)	1		
Scrub Brushes			
Spoons	1		

Figure 3: A Portion of the Current Inventory Page

The two pages whose data are integrated into the current inventory page are the weekly

item count page and the Google Form response data page. The weekly item count involves a

small number of the most used products, namely food, disposable products, and cleaning

supplies. Some of the items will be counted individually (e.g., Clorox wipes), others will be

counted by the package (e.g., ramen), and others will be given an estimate of how full their

storage bin is (e.g., savory snacks). The weekly item count was limited only to items that needed

to be frequently counted so as not to be a burden on the volunteer assigned to perform the count.

When the volunteer counts the items, they will note their name and the date of the count. The

data obtained from this page will automatically update the quantities listed on the current

inventory page.

	A	B	C
Name:			*clear columns before each count
Date:			
Weekly Food Items			
Bottled Water		1	
Cereal	3/4 full		
Coffee		1	
Coffee Creamer		1	
Fruit Cups		1	
Granola Bars		1	
Hot Chocolate		1	
Juice		1	
Milk		1	
Oatmeal		1	
Ramen		1	
Savory Snacks		1	
Sugar Packets		1	
Sweet Snacks		1	
Tea		1	

Figure 4: A Portion of the Weekly Item Count Page

While the weekly item count involves a manual count, the Google Form response data page is completely automated. The Google Sheet is connected to a Google Form where guests can select certain items they are requesting to receive. The items they can choose from on the form include forms/vouchers (e.g., a Rec Center shower pass), hygiene items, clothing items, and miscellaneous items such as to-go food bags or hand warmers. The items a guest selects will be noted on a page on the Google Sheet labeled "Form Responses." A second page in the Google Sheet labeled "Responses Data" is coded to identify specific terms listed in the form responses and count how many times each term is mentioned. For example, if eight guests fill out the form and select hand warmers, hand warmers will be mentioned eight times in the Form Responses page, and the Response Data page will note an eight next to the hand warmer box. The Current Inventory page then takes the amount listed in the Total Inventory page and subtracts the number given in the Response Data page.

Figure 5: A Portion of the Google Request Form

Figure 6: A Portion of the Responses Data Page

Figure 7: Form Responses Page

The Google Form and linked pages help automate a big part of the inventory count; however, they have two major limitations. First, the form doesn't allow the guest to enter the quantity desired. If the guest desires multiples of a certain item, they must fill out the form multiple times. Second, each specific size of clothing needed its spot, so the form appeared much larger than it was. To illustrate, there isn't one box for a men's shirt; there are individual boxes for shirts in sizes S, M, L, XL, XXL, and XXXL. It quickly becomes a lot for the guest to scroll through when each size is listed for socks, underwear, thermal tops, thermal bottoms, shirts, shorts, sweatpants, and bras. Then double that because there are sections for both men's and women's clothing. Due to the limited supply of children's clothing and the extreme variance in

children's sizes, sizes are not listed in the children's clothing category. If guests desire children's clothing, they can ask a volunteer to see what is available before filling out the form.

The William A. Burnard Warming Center Mastersheet is far from a complete, perfect product. When considering the lack of well-established inventory systems, the research and experimentation used to design the William A. Burnard Warming Center Mastersheet will hopefully further help the center identify and establish an inventory system that fits its specific needs and can serve the center for many years.

Reflection

Working on this project gave me a greater appreciation for people who can create, organize, and manage large organizations. There can be so many factors and opinions that go into each and every decision. When I decided to do this project, I did not imagine it being as difficult as it was to find a good solution for managing inventory. I love to be very organized, and I was familiar with different ways of tracking inventory through my previous jobs. This project, however, presented some unique challenges that I hadn't encountered in the past. Relying on donations created a large variety in the inventory instead of having standard items that were always expected to be there. For example, a restaurant only needs to keep track of the specific ingredients it uses. Our organization could accept almost any kind of food that was shelf-stable and didn't need to be cooked. Another unique challenge was that items were given to the guests instead of being sold to them. This made it harder to track what was being used because, when something is sold, an inventory system is usually able to subtract it from the current inventory automatically. The last challenge I will bring up is that the volunteers already had so much going on that most ideas for keeping track of inventory would have been too much to add to their plate.

These challenges made it difficult to find a permanent solution for inventory management, and during my time helping the warming center, we could not establish a permanent system. That is my biggest regret with this project—that we couldn't accomplish that goal. Looking back, I wish there was more I could have done to help, but at that time, I was also a full-time student, an undergraduate teaching fellow, working in a research lab, serving as a club president, and studying 20–30 hours a week for the MCAT. Before the start of that semester, my MCAT program told me it would only be roughly 10 hours a week, but that quickly changed

when the program actually started. I am grateful for Dr. Walters and the Honors Program, who worked with me and allowed me to extend my timeline for this project.

Despite the unforeseen challenges, I was able to learn and grow a lot from this experience. One of the things I learned more about was collaboration. As I wasn't the only person involved with this project, every step involved bouncing ideas off each other and discussing the pros and cons of each option before making a decision. With collaboration, it is important to acknowledge that each person has a unique perspective on the situation, and those differences in perspective should be embraced. Another important aspect of collaboration is working through disagreements. With those differences in perspective, not everyone is going to favor the same option. When that happens, it is important to think objectively about what is best for the organization.

Another thing I learned more about was a nonprofit organization. Meeting with Dr. Walters and other people who manage the warming center helped me realize how much it takes to run a nonprofit organization. It is not as simple as having an idea that serves the community and asking people to help. Protocol needs to be established, service hours and donations need to be tracked, and you have to worry about grant writing, taxes, etc. It takes a team of people who are experienced in varying career fields to make a nonprofit successful.

The last thing I learned that I want to mention is what it means to be a good member of the community. During my time helping the warming center, I met some really cool people who were all very different from each other but had the same desire to build up their community. I saw so many examples of selfless service that I hope to be able to emulate in my own life.

As someone working towards becoming a doctor one day, working with the warming center has helped me see the kind of doctor I want to be one day. I want to use my future

knowledge and skills to selflessly serve the community that I will live in. I want to give each patient the best treatment possible, regardless of whether they are homeless or have never had to think about where their next meal will come from. I also want to always have a mindset of appreciation for my circumstances and the things I have.

Even though this project wasn't able to help the warming center as much as I initially envisioned, I am grateful for the experience, what it taught me, and the people I was able to meet. I hope that this project will help them find the right inventory system that will work well for the center for many years into the future.

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Author Bio

Landon Corbett is studying kinesiology with a minor in chemistry at Utah State University. He graduates in the spring of 2024 and will be applying to medical school, where he hopes to become a doctor and continue to serve the community. One of Landon's favorite parts about Utah State is being a member of the Christensen Community Scholars. During his time at Utah State, Landon has served multiple times as an undergraduate teaching fellow (UTF) and received an award for UTF of the Year in 2023. Landon is also a member of the Honors Program at Utah State and currently serves as an ambassador for them. In addition, Landon is the founder and president of the Utah State chapter of the American Lung Cancer Screening Initiative. Further, Landon is engaged in research, working for the Institute of Antiviral Research as a lab technician.