PROCESS BOOK

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Olivia Doland Industrial Design Capstone 2023 The Ohio State University Huntington Bank Pop-Up Truck

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Huntington Pop-Up Truck

Many older adults rely on digital banking due to their physical limitations and decreasing access to traditional banks. However, they prefer human interaction and have concerns about their technological ability and security. Troubleshooting online banking poses challenges to older adults, hindering their ability to manage finances independently, which is a desire they strongly hold.

The Huntington Bank Pop-Up Truck aims to offer a more personalized banking experience by bringing in-person services and employees directly to older adults. Starting in Columbus, the truck will visit 23 independent living facilities monthly, welcoming all residents regardless of their bank affiliation.

For those unable to sign up online, each facility will provide a sign-up sheet for private 30-minute truck sessions addressing their banking needs. The truck ensures accessibility with features like a low chassis and ramp for mobility aids. Inside, it's welcoming and equipped with storage, comfortable seating, a large screen, and a setup for face-to-face interaction and collaboration. The onboard employee uses the truck's interaction guide to assist with typical bank services (except those involving cash). Whether assisting with transactions, providing answers, or sharing Huntington services, the employee caters to customers' preferences.

The Huntington Bank Pop-Up Truck initiative empowers older adults to bank independently while fostering customer loyalty and forging new relationships for Huntington Bank.

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Prompt

Project assigned by Huntington Bank:

"Since Lorenzo di Medici, banks have been central in framing people's interaction with money-related matters. While the day-to-day realities of today's banking couldn't be more different than Renaissance Florence, some its principle remain rooted in the models of the 19th and 20th centuries.

This deems the question of what banking and interaction with money could be like to reflect the spirit of the 21st century? What services and realities are overlooked, what technology could be developed, what do a branch, an ATM, cash, or checks mean to people, and are they even necessary? How can we innovate the banking experience to be more fitted to serve the needs of the public? To inspire the next evolution of the banking experience, we want to understand how people want to interact with money and banks in their daily life."

Introduction & Focus

Developed from secondary research:

Over the past few centuries, the primary functions of a bank have not changed much, but the many products and services a bank has to offer, along with the methods by which they carry out these services have changed immensely. Specifically, within the past decade, banks have transformed nearly all their services to be accomplished digitally, through a bank's website or mobile app. In doing so, banks have switched their focus from their branches and have pushed their investment of time and money into the digital sphere. In fact, banks have invested well over \$1 trillion dollars in evolving digital technology in the past 6 years alone (McIntyre, 2021). Between investment in new technology and the aftermath of the global pandemic causing many businesses and people to switch to remote services, bank branches have continued to close. From nearly 100,000 branches in 2009, the number has fallen to fewer than 80,000 locations in 2023 (Dobbs, 2023), with more than 4,000 of those closures having occurred since the pandemic heightened in March 2020 (NCRC, 2022). As closures remain on the rise, digital banking is becoming increasingly successful for its convenience and data analyzing methods, saving customers time, and allowing them to learn about issues like their spending habits in the click of a button. The number of digital banking users in the United States is expected to increase greatly in the following years, "starting from roughly 197 million users in March 2012, the number of digital banking users in the country is forecasted to reach almost 217 million by 2025" (Statista Research Department, 2023).

In questioning if everyone is being accounted for in this digital transition, it quickly became apparent that older adults have many issues and concerns surrounding digital banking. In narrowing in on older adults, secondary and primary research were utilized to uncover a very interesting problematic.

The Problematic

Uncovered from both primary and secondary research:

Many older adults are obligated to rely on digital banking services due to vulnerabilities, such as physical disabilities or issues surrounding bank proximity and closures, preventing them from being able to go in-person to their bank's branch. However, many older adults do not feel confident in digital banking because they prefer to bank with humans and have concerns about technological ability and security, which leads them to troubleshoot frequently. In troubleshooting through a digital format, older adults often wind up stuck in an ill-fitted customer service journey without a resolution to their issues.

How did we get here? Follow along...

Secondary Research

Through learning about banking history, regulations, and innovation, it became apparent that certain groups of people are increasingly vulnerable to changes in technology and banking business models. It was discovered that many older adults and their needs and wants are being overlooked, not just in banking but in changes to business models everywhere. Within this focus, it was important to look at information from all angles, accompanying business, science and technology, and the arts. This involved reading and reflecting upon many articles, journals, and various types of media about older adults, banking, and the necessary in-between, to form insights that could contribute to primary research. In learning about the artistic and emotional side to technology and banking, a quote by author Douglas Adams sets the tone for older adults in stating:

"Anything that is in the world when you're born is normal and ordinary and is just a natural part of the way the world works. Anything that's invented between when you're fifteen and thirty-five is new and exciting and revolutionary and you can probably get a career in it. Anything invented after you're thirty-five is against the natural order of things" (Becher, 2014, para. 4).

The idea that innovation, specifically innovation in technology, can feel earth-shattering and confusing for older adults has been echoed greatly in both this secondary and primary research. Throughout history, companies and people in general have had a tendency to believe that older people are not interested or capable in keeping up with technological innovation, and in doing so regret to include them in the design process (Manjoo, 2023). Because of this exclusion, it was quite difficult to find secondary information and statistics on banking with adequate representation on older adults, in comparison to younger consumers; this was echoed by participants later in the research, as one codesign participant expressed that he's taken multiple surveys where once he said his age, the surveys ended. From the information found, it revealed that many older adults are insecure about digital banking because they do not understand the technology or trust its security because they have fears surrounding new technology and financial fraud. This is not surprising given they are a targeted population for scams.

For instance, the FBI reports that losses from elder fraud cases rose 84% from 2021 to 2022, with the most common cases surrounding tech and customer support schemes (Eller, 2023). In addition to security concerns, many older adults believe there is insufficient human input in digital services as the Finance Foundation found that "86% of seniors opt out of digital banking because they "want people, not machines"" (Levant, 2020, para. 11).



So, are older adults banking digitally?

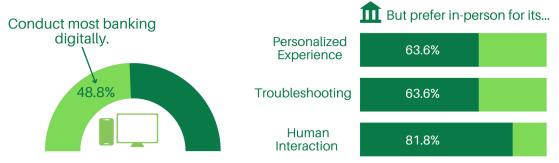
Based on this information, the goal for primary research became to better learn and understand the banking habits, concerns, journeys, preferences, and hopes amongst older adults.

Primary Research

- Survey (Analysis of those ages 75+)
- Interviews (10 older bank customers + 7 employees)
- 3 codesign sessions with (12 participants total) each including: A banking concerns and hopes projection, a bank app discovery + usability review, prototyped banking conjecture analysis.

Survey

Primary research began with a survey and analysis of day-to-day banking habits and preferences in older adults ages 65 and above. The survey was offered in an online, physical, and verbal format to include those with vision or hearing issues, those who do not have internet access, and those who do not know how to complete an online survey. Within 13 days, there were 116 responses to the Financial Questionnaire. In analyzing it by age range, it uncovered that there is a decent difference in the habits and preferences of those in the 65-74 age range versus those who are 75 and up. For instance, 74% of those in the 65-74 age range conduct most of their banking transactions digitally, whereas only 48.8% of those 75 and older conduct most of their banking transactions digitally. Based on this consideration, the analysis of the survey focuses only on responses from people ages 75+, along with the rest of the research. In looking at the survey results from those who are 75 or older, of those who conduct most of their banking digitally, 63.6% prefer in-person banking for its personalized experience and troubleshooting, and 81.8% prefer in-person banking for its human interaction.



Survey responses of those ages 75+ who primarily bank digitally

So, for what reasons are older adults banking digitally?

Interviews

The next step was interviewing older adults to find out why they bank digitally and how they feel about it. Quickly in this process, it became apparent that banking can be very emotional for older adults, as many of them told stories about the enjoyment they used to have going into their local bank branch, or the frustration and sadness they felt when they no longer could. They were asked questions about their banking habits, and as opposed to the survey, they also explained "why" these are their habits and preferences as well. For instance, many of the people explained that they now are obligated to bank digitally because they can no longer get to their bank branch due to a physical disability or a proximity issue (typically based on bank closures). For instance, one woman with vision impairment due to age-related macular degeneration explained how she used to love going to her local bank branch to interact with tellers who knew her by name and carryout banking transactions with in-person human assistance. She no longer has the option of going in-person because she cannot see well enough to drive and her bank is no longer close enough to walk to. In banking digitally, many of those interviewed expressed that they do not understand how to accomplish certain functions and they struggle getting assistance. When they try to troubleshoot or ask a question it leads them down a rabbit hole of having to explain their problem to multiple customer service representatives, and often they tell them they will just have to go into the bank's branch.

"When I went to the branch, they knew me personally and would ask how the families doing." - Paul (80)



"I'm stuck with digital banking, but I often struggle with it. I'm constantly worried I've made a mistake." - Nancy (78)



"I can't drive to get to the bank anymore because my macular degeneration is too bad." - Mary (79)



Interview storytelling

In hearing how many older adults find their relationship with bank employees to be crucial to their experience, interviews were conducted with bank employees from Huntington, Key, PNC, JPMorgan Chase, Civista and Dollar Bank with various expertise in bank telling, bank management, client engagement, private banking, internal banking systems, and banking fraud education, to gain their perspective. It was uncovered that the digital transition has also had a very heavy impact on them.

In asking them about the many shoes they have filled as a bank employee, they told various stories about how bank telling often reflects a social service. For many tellers, connecting with their customers and learning about their lives and families is just as important in assisting them with banking tasks. They explained how it is especially important for them to connect with their older clients because for many older adults it can be their only point of social interaction in the day or week. When asked what it was like for these employees as their banks began transitioning to digital formats, many expressed the pain they felt in training customers to do something that would eliminate their own job. Amidst the pain and frustration, these employees have not hesitated to try and educate and support their customers within their digital transition. When asked how they assist older customers, a big theme is that they try and sit down with them in-person, work with them together in a collaborative way, and provide them with real world examples they can comprehend and relate to.







"People don't bank with "they were having us work towards eliminating our own jobs."



"I sit down with them and explain how to do things because knowledge is power."

Employee perspective

Codesign

To get more of a hands-on perspective from older adults, 3 separate codesign sessions at independent living facilities of varying economic status were completed. The first at the Knickerbocker Apartment Community in Bay Village, Ohio (a senior low-income housing department that is subsidized by the federal government), the second at StoryPoint Senior Living in Powell, Ohio, and the third at the Ohio Living Westminster Thurber in Columbus, Ohio. Among the three sessions, there was a total of 12 participants with ages ranging from 75 to 88.

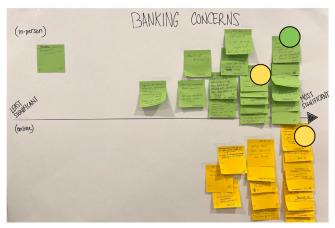






Codesign sessions

During each codesign session, participants were given sticky notes to write out their biggest in-person and digital banking concerns, along with their most prominent banking hopes, then they would have a collective conversation about them, listen to each other's stories and project them along a scale of importance, which was a collective decision. There was a great deal of insight from the collective storytelling - what was most prominent is that the groups said the biggest in-person banking concern was not being able to get to the bank branch. Not so much the in-person experience but wanting to go there and not being able to. How can you worry about anything else concerning the in-person experience if you can't even get there? One participant explained how she used to love to go in-person because the relationships she had built with the staff made the bank feel like family, and she felt she could truly trust them to manage her money. Within the in-person concerns, they also spoke of frustration with the "messy in-between" of in-person and digital banking where they are told they need to go in-person and accomplish certain tasks physically and others digitally, making it hard to delegate seeking assistance from the bank's branch or its digital assistance methods. Speaking of assistance, the most significant digital banking concern was the lack of adequate assistance for troubleshooting with their technological skill level. Many participants feel stuck when they do not know how to complete banking tasks digitally and cannot get the help they need. Another participant explained how when her husband passed away, she had to reset up her digital accounts and bill pay, and when she had trouble getting the customer service she needed, it made the situation more frustrating and sadder than it already was.

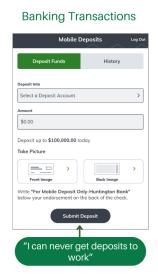


In - person Concern: Not being able to get to the bank.

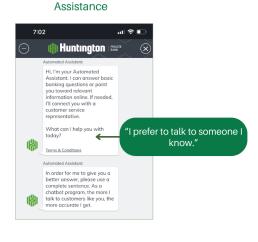
Digital Concern: Lack of adequate assistance

Banking concerns projection

In keeping those collective concerns in mind, a heuristic evaluation of mobile banking apps was done (Huntington, Chase, and Citizens Bank), where the biggest takeaway for this research is that with mobile banking apps you can accomplish anything from banking transactions, troubleshooting, and receiving personalized financial advice on items such as spending. As part of each codesign session, participants took a closer look at the Huntington Bank App. What was interesting is that something that looked like a straightforward process, such as depositing checks, because it has visual and worded instructions, brought up many questions from participants. Questions of "how would I do that", "I would need someone to help me learn and make sure I did it right" came up which created a bigger conversation about the journey they take to troubleshoot through digital banking.

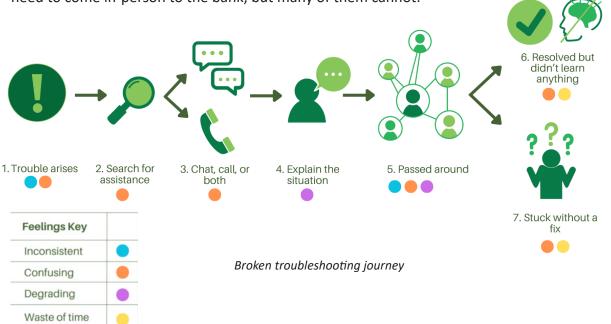






Usability review

Through bucketing from specific stories within codesign sessions and interviews it became possible to visualize what that journey looks like for them, and where specific pain points are within an overall painful process. It starts off with an issue, like they cannot understand how to complete a task, something doesn't look right, or they are afraid they made a mistake, then they search for ways to get help, and when written direction doesn't work, they resort to chat or call options, they explain their issue but have to repeat themselves again and again as they get passed around on the phone. Frustration sets in as they wait on hold, and the customer service makes them feel dumb or belittled for being old. As the experience ends, they either have their issue resolved but did not learn anything for how to improve and gain more confidence for next time, or the issue isn't resolved and they are told they might need to come in-person to the bank, but many of them cannot.



In switching the conversation from concerns to hopes, the biggest collective banking hope was to be able to bank independently for as long as possible. In other words, to keep up with banking methods and be capable of doing their banking on their own, so no one must take over their finances anytime soon.

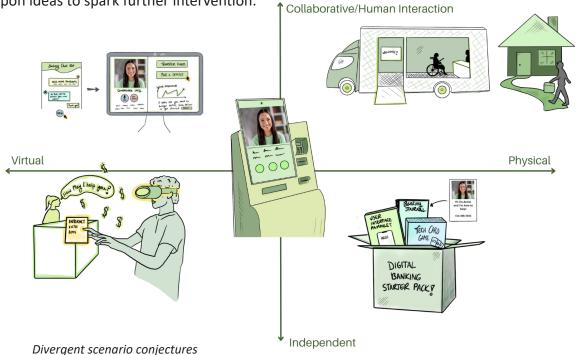
One participant explained how it is up to him to keep up with digital banking because he does not have much family left, and he would not have anyone to take over his finances.



Hope: To be able to bank independently for as long as possible

Banking hopes projection

With that hope being said, participants were presented with 5 conjecture concepts of a personalized AI + co-browsing functionality, a virtual reality banking experience, a community banking kiosk, a digital banking start pack, and a "mobile" bank food truck. These conjectures were displayed across a divergent scenario axis of compromise between independent against collaborative/human interaction ideas, as well as virtual versus physical ideas, for the sole purpose of comparing and reflecting upon ideas to spark further intervention.



The participants had a lot to say about these. Most expressed their liking for more physical and collaborative ideas, like the "mobile" bank and community bank kiosk because of the ability to carry out all their banking needs in one place with the assistance of a human. They also brought up concerns about these conjectures that I did not even know existed. For instance, when dealing with biometrics through the kiosk, many of them explained that because of their age, their fingerprint no longer shows up or works for them. This further proves the need for their feedback to rethink experiences.

"Mobile" Bank Food Truck



Pros:

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-in-person experience without going anywhere -real people and materials

Figure out:

-operational schedule -make transportation





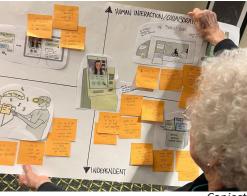
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Pros:

-enlarged features with real physicality -face-to-face interactions

Figure out:

-scheduling -privacy -onboarding





Conjecture critiques

It was interesting to hear the features and solutions they desired with these conjectures. For instance, with the banking kiosk, participants were able to work with a cardboard prototype to make sticky notes of specific buttons and features that would need to be available. Participants expressed a desire for as limited of buttons possible, an enlarged and simplified design, and a better journey or schedule of getting in contact with an employee.

What can we do with this research?

Huntington Bank has expressed an interest to increase customer loyalty in the financial service space. Their strategists recognize a need to get the basics right, lower customer friction points, and make banking more personal to them as a way to make them more worry free about their banking and therefore more likely to utilize Huntington products/services.



Visual Huntington strategy

Given that Huntington is looking to increase customer loyalty in the financial service space...and given that many older adults are now obligated to digital bank due to vulnerabilities, but they lack confidence in the experience and well-fitted forms of troubleshooting...

There arises a project opportunity to design more well-fitted forms of banking and troubleshooting for older adults in hopes of increasing their confidence in their banking (and therefore their customer loyalty) so they can bank independently for as long as possible.

If you would like to see a detailed reflection on secondary research materials and each conjecture, feel free to visit the link below:

https://desis.osu.edu/seniorthesis/index.php/olivia-doland/

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Continue reading for project development!

Project Development

Project Brief

Problematic:

In the past decade, many banks have innovated to allow for nearly all their services to be accomplished digitally through their websites and mobile apps. In doing so, it has allowed banks like Huntington to redistribute efforts away from their branches, closing many and pushing investments towards evolving banking technology. Through primary and secondary research, it was discovered that many older adults are obligated to rely on digital banking services due to vulnerabilities, such as physical disabilities or issues surrounding bank proximity and closures, preventing them from being able to go in-person to their bank's branch. However, many older adults do not feel confident in digital banking because they prefer to bank with humans and have concerns about technological ability and security, which leads them to troubleshoot frequently. In troubleshooting through a digital format, older adults often wind up stuck in an ill-fitted customer service journey without a resolution to their issues. In knowing that older adults hope to be able to bank independently for as long as possible, they need ways to keep up with digital banking.

General objective and prescriptive:

Provide more well-fitted forms of banking and troubleshooting for older adults, especially those obligated to rely on digital banking services, so they can bank independently for as long as possible.

Specific objectives:

- a. Given that many older adults prefer human interaction and the opportunity to build relationships in their banking and troubleshooting...we can better employ qualities of an in-person experience in the banking process.
- b. Given that many older adults do not feel they have learned anything from current banking troubleshooting methods, we can make banking a more educational process to prevent as much troubleshooting in the future.
- c. Given that banking is not a one-size-fits-all experience, and every customer is different...we can allow for banking and troubleshooting methods to be more personalized to each older adult customer.
- d. Given that older adults hope to be able to bank independently for as long as possible... we can allow for better ways to keep up with modern banking processes and new technology.
- e. Given that Huntington is looking to increase customer loyalty and set itself apart from other banks, we can reimagine the banking journey for older adults to be unique to Huntington and increase customer satisfaction and loyalty.

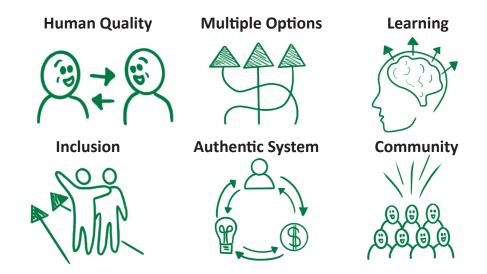
Project parameters:

Stakeholders

- a. Older adult bank customers (specifically those obligated to rely on digital banking)
- b. Huntington bank: business + employees (i.e. tellers, designers, Huntington's digital & traditional bank service industry)
- c. Older adult families and friends (and anyone with concern for their wellbeing)

Features

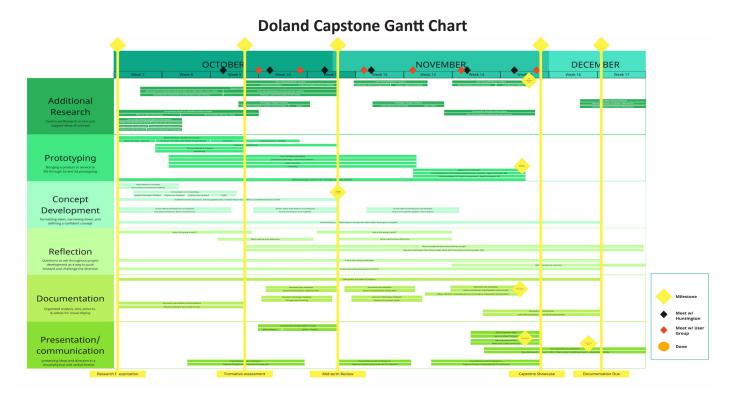
- a. Better implementation of human quality ex: face-to-face interaction, relationship building, conversation, and empathy
- b. Allow for more than one way to troubleshoot an issue or accomplish a transaction.
- c. Ways to learn from an issue + prevent more troubleshooting.
- d. Ways to stay up to date on evolving banking technology and its functions.
- e. A business model to compare to competitors.
- f. The opportunity for collaboration and community-based interactions.



Qualities & attributes

- a. Should make the customer feel valued/cared for.
- b. Should be a consistent process.
- c. Should be educational.
- d. Should be simple/straightforward: easy to understand or learn to use.
- e. Should have the Huntington Visual Brand Language.
- f. Makes banking activities easier, more convenient, and more enjoyable.

In order to address the brief, it was important to organize the necessary tasks needed to be completed to make development possible in a matter of weeks. A gantt chart was found to be the best method to organize major tasks and milestones and see how they compared to others in the timeline.

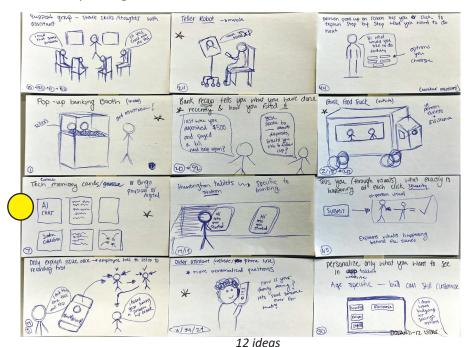


Concept Ideation

Project development began with a 52-idea-brainstorm with the collaboration of 4 of my design peers.

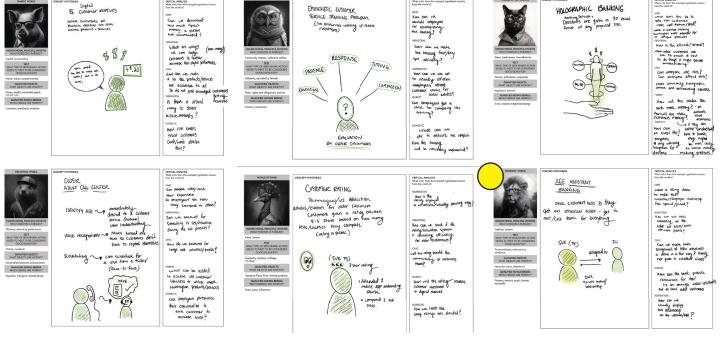


From these 52 ideas, I began to further define and visualize 12 concept opportunities, such as a tech memory card game.



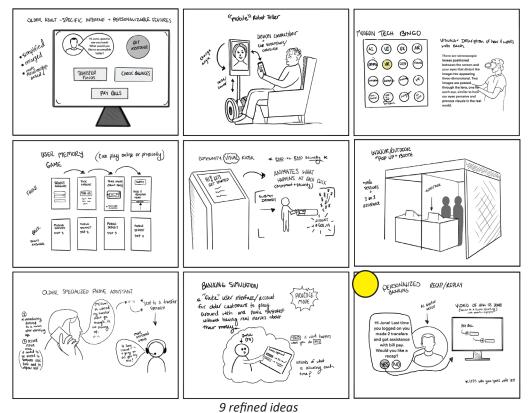
I then challenged my ideas under Dr. Sébastien Proulx's Perspective Shift method, where I was able to

iterate and reflect on concepts based on the principles and tests of our society's "worlds", such as the domestic world, which is focused on tradition and esteem. During this activity, I really started to develop and reflect on the relationships that need to be involved in each concept. How might one facilitate the different types of interaction necessary during banking troubleshooting?

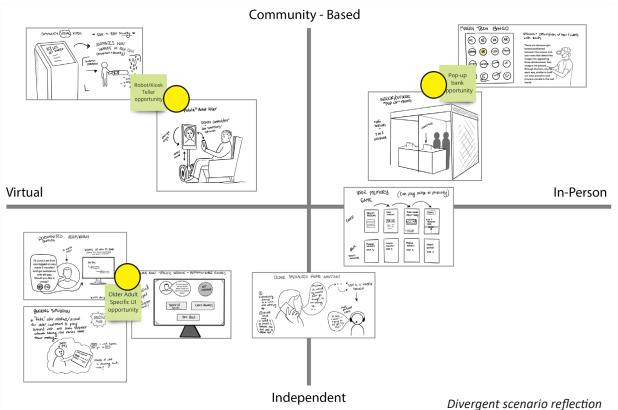


Perspective shift reflection

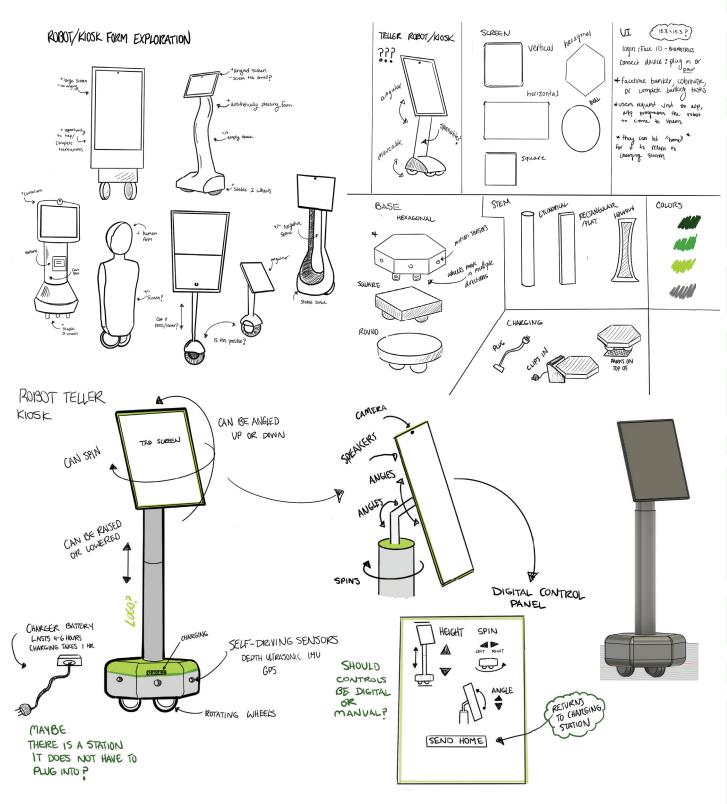
I further thought out 9 concepts, such as the personalized banking recap/replay, which would be a user interface intervention that tells a customer exactly what they accomplished the last time they were on the bank's mobile app.



I then put these 9 ideas through a divergent scenario, which involves plotting ideas against axis of compromise for the sole purpose of reflection. In looking at my ideas against axis of virtual to in-person and independent to community-based (or collaborative), I found 3 exciting opportunities to dive into: a robot/kiosk teller, a pop-up bank, and an older adult specific user interface.

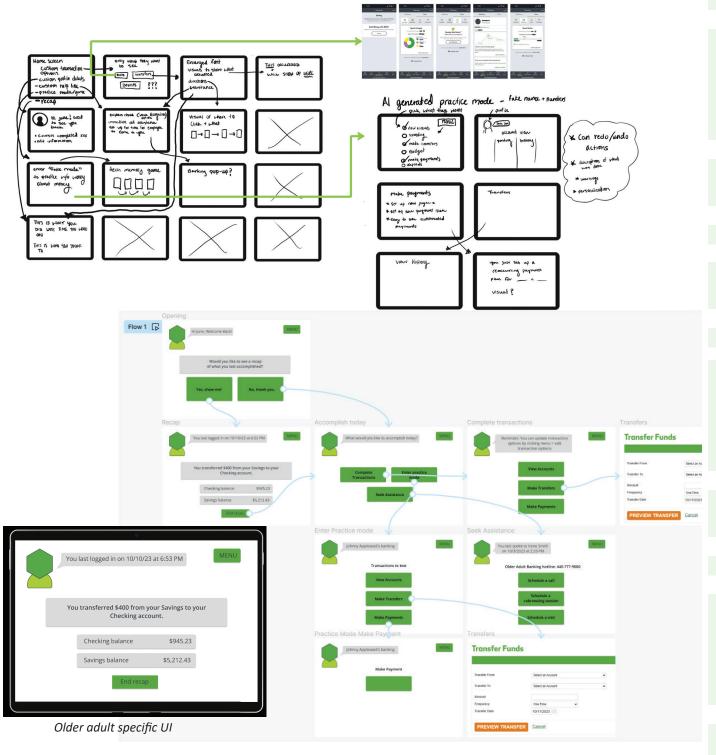


I worked further on these 3 opportunities to then present them to older adults. The first is a robot banking kiosk that can move around independent living facilities and assist those in need of teller face-to-face interaction, cobrowsing, and enlarged screen features during their banking and troubleshooting. In addressing what robots and kiosk exist on the market, it emphasized a need to explore aspects of shape and form like screen size, height, angles, and movability. I then further visualized the potential look and use of this concept through sketching and 3D modeling.



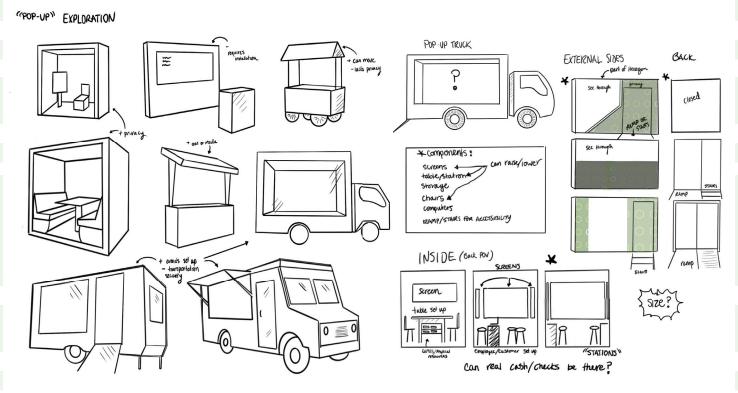
Robot/kiosk teller development

The next concept idea was a user interface that seeks to combat digital banking troubles for older adults and allows for multiple ways to troubleshoot. The wireframing below seeks to figure out how to incorporate custom transaction options, fewer and enlarged choices, and more personalized commentary, like banking recaps of what a person did last and where they can go to address new needs. One feature could be an AI generated practice mode, where the user can complete banking transactions on the same Huntington UI they use, but the transactions involve fake numbers, money, and payments, so there is no anxiety about making a mistake. In looking at Huntington's current app, along with apps specfic to older adults, it was helpful in pointing out some features that need to be addressed or taken away, like the "overwhelming" amount of options on screen. It was also helpful in thinking about what could be added, like a playful communication center. In order to iterate on this concept I started by wireframing ideas and prototyping them in Figma.



The last of the developed concept is a pop-up bank that can take the in-person experience of banking to older adults who cannot get to the bank themselves. In looking at what "pop-up" can mean to the current market, it helped to define important questions to be considered, like should this concept be on wheels, how is it displayed, and what is happening on the inside vs. the outside? A pop-up truck seemed to be the most favorable idea for its lack of set up and reachability.



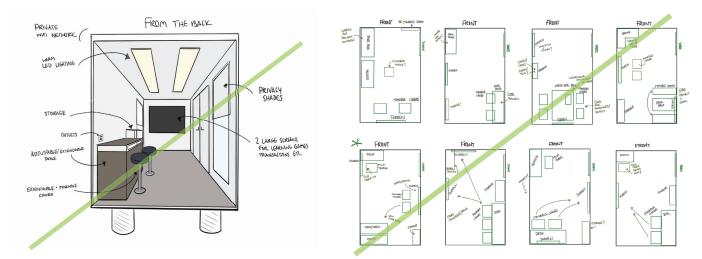


Pop-up exploration

After communicating with older adults, the pop-up truck idea became the chosen concept. It was favored for its ability to bring the bank directly to them with its in-person qualities of face-to-face interaction and community-based collaboration. Follow along for further development of this concept through iteration based on formative assessments and user + Huntington employee feedback.

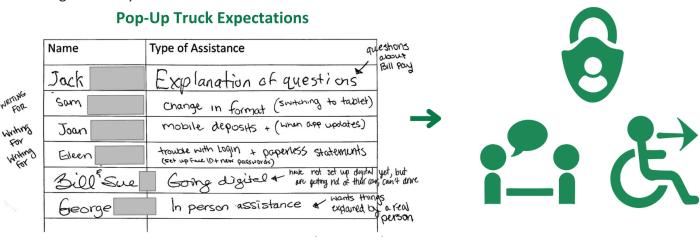
Formative Assessments

In the beginning of the pop-up truck development, I originally thought that a large truck with room for multiple customers at a time, games, multiple large interactive screens with recent banking innovation, and movable barstools would make sense. However, upon accomplishing an exploratory formative assessment at an independent living facility, I learned my hypothesis was quite off.



Hypothesized truck layout

I showed up to an independent living facility and announced that Huntington Bank has a pop-up truck being developed and I asked people if they would be interested in signing up and noted their expectations for the trucks space. In doing so, I realized that people were less concerned about addressing specific transactions and more concerned with expressing the need for an easy way to have private conversation and the opportunity to sit down with a bank employee and get their questions and concerns explained in person. What each conversation taught me is that the layout of the space should private in the way that only one customer or partnership can be there at a time, it should create the opportunity for the guest and employee to be able to sit down together and collaborate face to face, and it should be accessible to allow for easy movement and multiple resting points for those utilizing a mobility aid.

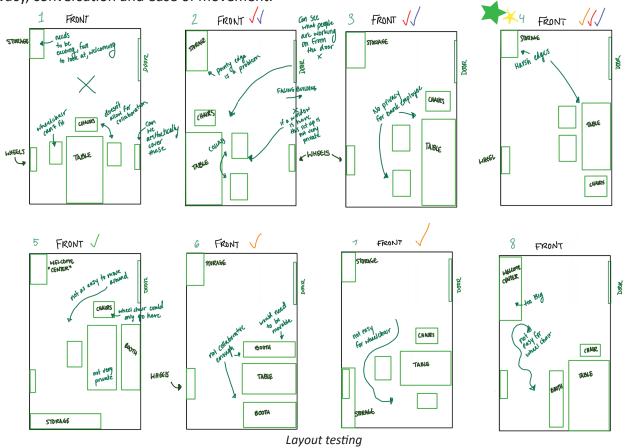


Exploratory study

With indicators to use to test potential truck interior layouts, it was first necessary to figure out the mechanical structure of the truck along with its interior dimensions. In completing in-person and online market research about truck/bus sizes and functionality, on top of interviewing the director of safety and engineers for two truck/bussing companies, I was able to determine the truck should be 3500 cutaway model with a custom low-chassis. This would allow for an interior space of 180" by 90", and would be the desired specifications for a truck that can comfortably hold the weight of a spacious interior and has an accessible low entrance for older adults.



With interior and exterior dimensions solidified, we were able to confirm the truck would fit well within truck/bus laws, and that the driver does not need a special license. Therefore, I was able to focus in on designing the interior layout. After iterating 8 potential layouts for the space, we were able to evaluate how the layouts might sit within a 1:1 scale prototyped outline of the space. Using paper cut-outs, we tested layouts that have table and storage lengths anywhere from 25"-70", and seating between 18"-21", allowing us to determine that layout option 4 allows for the greatest opportunity for privacy, conversation and ease of movement.



In testing each layout for ease of movement, I used a real wheelchair to move around within the space, which allowed me to note specific issues that I would not have been able to without a mobility aid.



STOKAGE Constituted to the MONABLE CHAIRS Landed layout

While testing the layouts, it was necessary to make sure the space between furniture is ADA compliant, allowing for a minimum of 36 inches of space for passage and a minimum of a 30 inch width for resting space. With the flat layout thought out, it was time to add dimension to the interior through a series of form and appearance explorations.

If you would like to see a more detailed description and reflection of my formative assessment plans and report feel free to click the link below:

https://drive.google.com/file/d/1GkPgcKPFWsbj1LoFllpKs01RZ0lfBugz/view?usp=drive_link

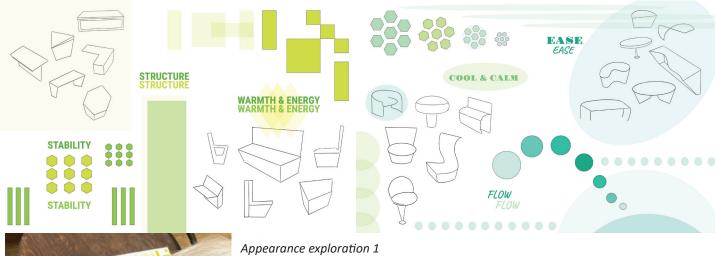
Form Iteration & Appearance Exploration

Truck Interior

In being ready to adress the interior of the truck, it was valuable to analyze how Huntington utilizes its branding in the interor spaces of its offices and branches. It helped me think of multiple ways to implement the Huntington VBL within the pop-up truck.



Next, it was important to figure out how older adults want the space to look and feel in its 3D form. I ran a series of 4 appearance explorations, getting feedback from 6-7 older adult residents of independent living facilities each time. In the first exploration, I presented older adults with two abstract mood boards and we had a discussion. I learned they feel it is very important that the space feels calming and its furniture creates a "flow" within the interior, so they are at ease while doing their banking or troubleshooting.

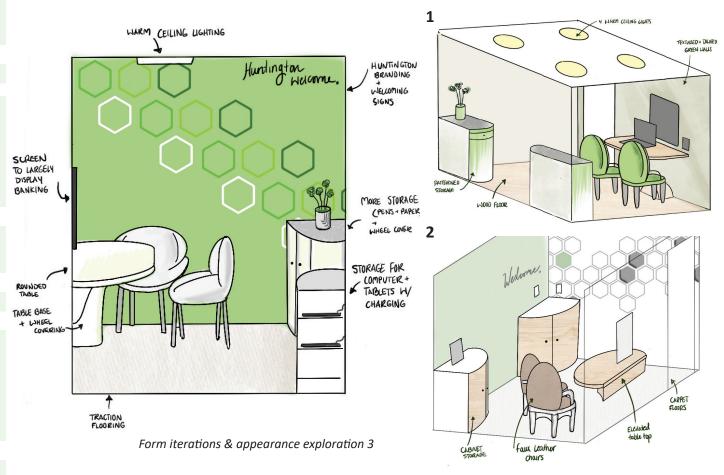


Based on what I learned, I created 2 mood boards, Soothing Rhythm and Earthly Serenity, to which the same group of older adults agreed that a combination of the look and feel of these 2 boards would be most preferred with natural materials, and a more balance use of the Huntington greenery.

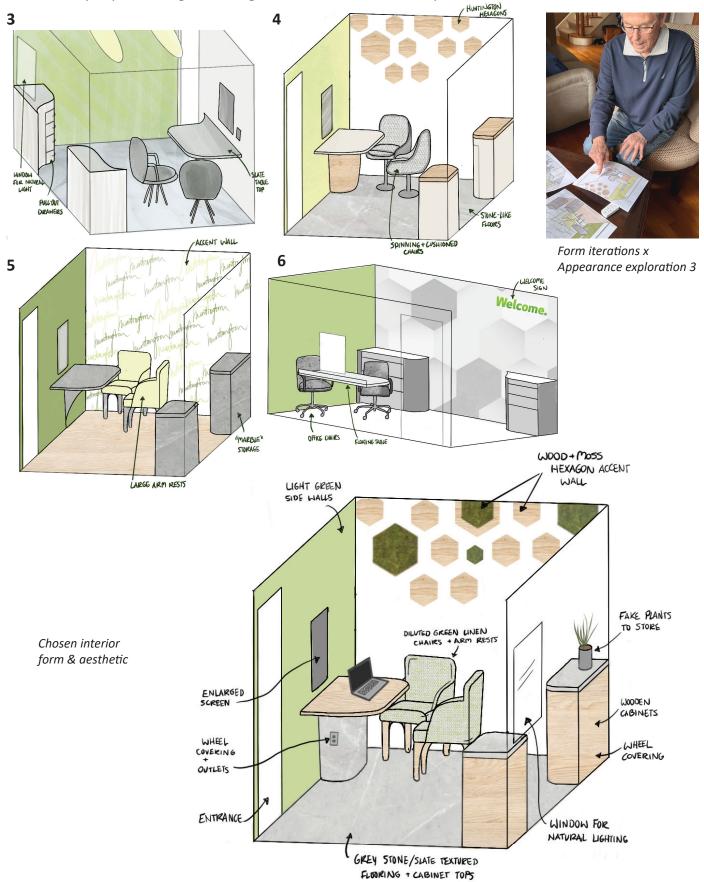


Appearance exploration 2

In creating scaled drawings based on a fusion model, I was able to test what different shapes and styles of furniture could look like in the space. It was important to consider materials and textures that will work well in a moving truck, for older adults, and within the Huntington branding. In showing 6 iterations to 7 older adult, I learned how important it is for the chairs to have arm rests to be easy to get in and out of, and that there is a push for an accent wall and elements of branding in the truck that are fun to look at and make the space feel more meaningful..



There were the most votes for options 4 and 5. For 4, they liked the use of wood and stone/slate for materials, and the hexagon accent wall. For 5 they really liked the subtle pops of green and how comfortable and stable the chair seems. After speaking with Huntington, I was encouraged to merge the two by implementing more feng shui + balance into to the space.



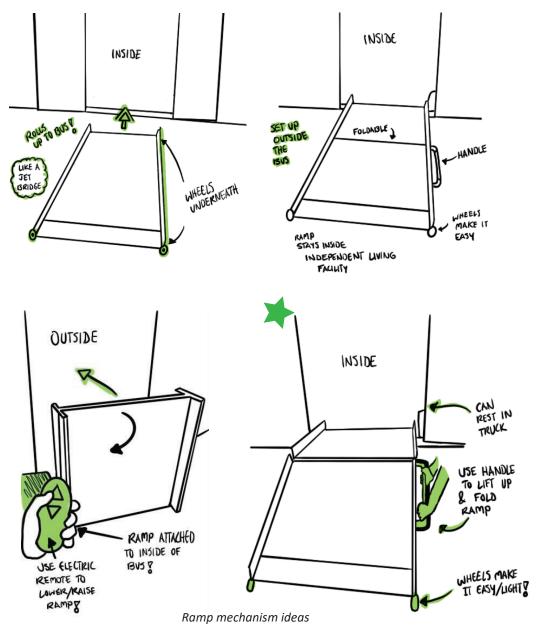
Truck Exterior

Before refining and developing the form of the interior, it was necessary to continue with the appearance exploration for the exterior of the truck. It is important that the exterior of the truck harps on the essence of the Huntington brand and not only is easily identifiable, but creates a marketing opportunity from its innovative look. Things to note about the exterior appearance that are already solidified is that the truck itself will sit on a low chassis and will have a 41.5" door on the right side of the cutaway and a 32" wide window on the left.



A group of 7 older adults most favored the top right design for its hexagon pattern and identifiable green hues. However, they recommended increasing the scale of the logo to make it more prominent. With both the interior and exterior appearance well on their way, I could start developing the form of the interior and prototyping the appearance model.

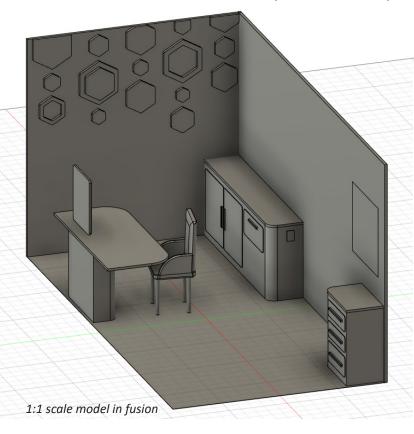
While iterating on the exterior appearance, it was also necessary to iterate on the mechanism for guest entrances. It was already known that the truck will have a low chassis to make the interior lower to the ground and prevent the need for steps. But, for guests utilizing a mobility aid, it was important to take this further and provide a ramp for a smooth and easy entrance. While I was not going to design and develop a new ramp within this specific project, I still needed to figure out what kind of ramp would make most sense for this truck. I iterated a few ideas, and talked to Huntington, to decide that a foldable ramp would be the easiest mechanism for the employee, while remaining the most affordable option. In researching ADA compliant ramp sizes as part of the market research completed when deciding upon the structure and size of the truck, I was encouraged to implement a ramp that is 36 inches wide and 63.5 inches long. With the low chassis and ramp working together, the slope will be exceptionally low and create an optimal entrance for guests.



I then needed to utilize a mix of 3D modeling, analog prototyping, rendering, photoshop & sketching to develop the interior and exterior form of the truck into a deliverable for both Huntington and older adults.

Form Development

In order to refine and develop the interior, I utilized Autodesk Fusion 360 to 3D model the space and test different appearance iterations with accurate proportions. Once I landed on the final iteration, I was able to model the space fully, down to each accurate measurement. This required a lot of trial and error for the math and dimensions of each component. I needed to account for elements of the truck that I could not rearrange, such as where the wheels/wheel coverings sit in the truck. Therefore, I made sure that the table and back right storage component covered each back wheel covering not only for aesthetic, but also to make sure they would not disrupt movement within the space.



Object + Dimension	Length	Width	Height	Direction
Cab	95	83	86	
wheels	26.5	8.85	26.5	*9.75 cut height *40 inches in up front from mid circle *67.5 from back in mid circle
ramp	63.5	36	-	
curb	-	-	5	
cutaway lengths cutaway widths	180 90	-	95 95	
door	41.5	-	80	*up 8" in from front
storage 1	27	16	33" up	*4.5" radius
storage 2	80	14	33" up	*4.5"radius
table top table base	67 30.97	29 10.25	30.5" up 29.25" up	*starts 31" in from back and is 32" from door *3.5" radius
chair	18.75	20	38.75	
screen	20	-	24	
window	32	-	30	*8" in from wall and 22" down from ceiling

Space Between
Storage and Table
45"

19"
Knee Depth
Height

33" Storage Heights

Dimensions

ADA compliant dimensions

In order to deliver the trucks appearance and form to Huntington and older adults, it was important to utilize an analog method that all stakeholders can understand. Therefore I decided to make a 1/10 scale appearance model that allows people to conceptually understand the truck in its entirety rather than just bits and pieces. This required scaling all the 3D modeled measurements I had worked through to 1/10 their size, gathering materials, and creating illustrator files for lasor cutting different components. I wanted the exterior and interior of the truck to be viewable from the front, side and top, so I needed to make the truck without its ceiling/roof and I needed to utilize transparent acrylic for the left wall.

Object + Dimension	material	method
Cab	chipboard	laser + glue + paint
wheels wheel covering	plywood chipboard	laser + glue + paint laser + glue + paint
ramp	chipboard	laser + glue + paint
curb	plywood	cut + paint + glue
cutaway lengths & widths	plywood, acrylic	laser + glue + paint
door	cut	laser
storage 1	chipboard	laser + glue + paint
storage 2	chipboard	laser + glue + paint
table	laser + glue + paint	laser + glue + paint
chair	wood, dowel rods, clay	laser + mold + sand + glue +paint
hexagons	plywood	laser + glue + paint
screen	chipboard	laser + glue + paint
big base	plywood	laser + paint





Placing + gluing pieces together



Chair making

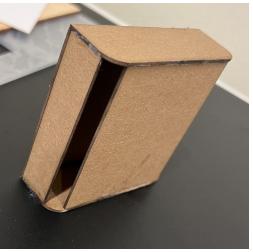


Table & storage making

After lots of laser cutting, gluing and painting, components to the appearance model were finished up and I also cut scaled human silhouettes, so stakeholders could better understand how people interact and fit within the space.



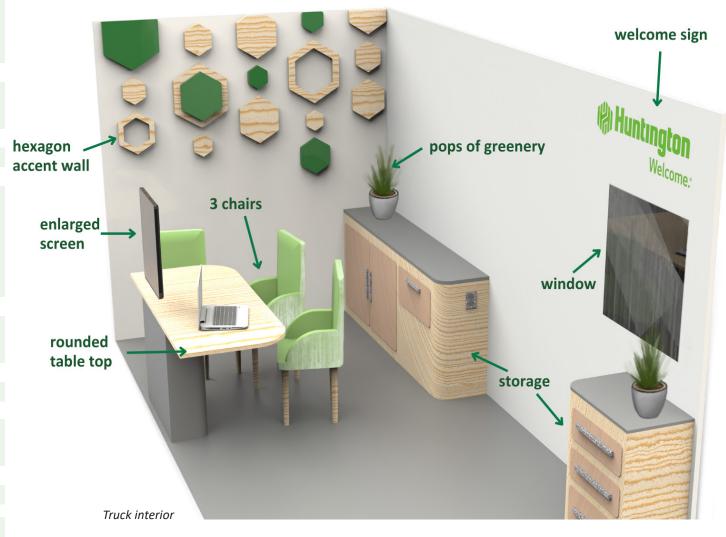






1/10 scale appearance model

Then through the use of KeyShot, photoshop and sketching, I was able to finalize renderings of the interior and exterior form. Materials and finishes were important to manipulate to make the space not only feel real, but further convey that calming essence of the Huntington branding.



Materials and Components

The trucks wooden storage, accent wall, and table top create a comforting sense of balance, aligning with older adults' desire for natural materials within the truck space. The green linen chairs invite guests to sit comfortably, and the smooth faux concrete finish on the floors and counter tops ground the area and complement the various pops of greenery throughout the space. The faux concrete allows the floors to remain light in weight, but an ardex feather finish Other finishes like the Huntington welcome sign and plants make the space feel more welcoming and professional, allowing guests to feel as if they are actually at the bank, not in a truck. The storage creates organization for analog and digital tools on the truck, such as the laptop, tablet, chargers, paper fliers and notepads, along with any personal necessities the bank employee might have. The back right storage and table base also cover the back wheel coverings of the truck, to keep the trucks aesthetic, while allowing it to still sit low to the ground. The small table base also allows the table top to look as if it is floating for aesthetic, while also providing the necessary knee space for all guests, especially those in a wheelchair. The 3 chairs make it possible for any type of guest partnership (i.e. spouses) to be able to work with an employee together in one session. The window and doors of the truck will allow natural light to come in amidst the LED lighting it will already have.

The truck exterior will have a smooth transition from the cutaway to the cab, with a blended and contrasted use of greens to make the logo and hexagon patterns stand out. It will be easily identifiable to welcome guests and create interest and buzz surrounding the initiative while the truck makes its commutes to and from different living facilities. The low chassis and foldable ramp create a barely noticeable slope, making entrance smooth and easy for those utilizing a mobility aid.



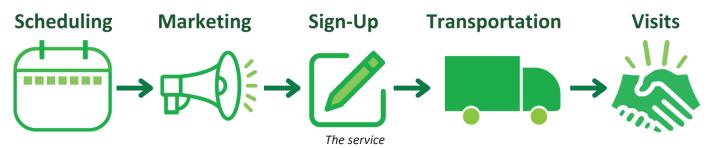




Truck exterior

The Service

With the interior and exterior form and aesthetic of the truck solidified, I can begin to address the the various scenarios of use involved in the pop-up truck service. Developing this service occurred simultaneously while working on the truck itself. We first scoped the project to begin in the Columbus area, therefore only concerning the service with Columbus independent living facilities. For this process to work it starts with bank employees working together with each living facility coordinator to schedule each visit. Then the process continues with marketing the visit, creating an opportunity for signups, getting the truck to each facility, and facilitating the visits as well. To figure out these components I had to work out of order starting with addressing transportation.

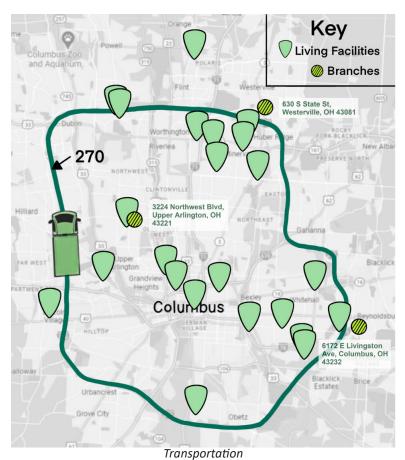


Transportation

In finding that there are 23 facilities in the area without their own banks, it was important to figure out their proximity to each other and local Huntington branches to determine where the truck would park and how long commutes would take. In noting the Huntington offices in the surrounding Columbus area, I utilized maps to figure out their proximity to the facilities and their ability for parking. In utilizing locations near I-270, such as the Westerville, Livingston, and Upper Arlington branch the truck could park at either and get to each facility in less than 25 minutes. Or the truck could switch between parking locations to make its commutes even closer.



Mapping & proximity



Scheduling

With transportation understood, it was a matter of figuring out how long each visit should be and how often. In utilizing codesign research, I learned that the older adults would benefit from 30-minute sessions based on the average times they spend completing tasks and troubleshooting. With there only being 23 living facilities and the fact that Huntington branches have a 6-day work week, we could start by doing full day visits at each facility once a month, working with up to 12 customers or partnerships in an 8-hour workday. Therefore, this schedule goes based on location of the facility, splitting it up by proximity to those 3 branches and allowing for closer commutes.

Huntington Bank Pop-Up Truck Schedule December 2023 Example

				•		
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	1 Argus Court	2 Castleton Gardens
3	4 The Grand Court Columbus	5 The Ashford on Broad	6 Wexner Heritage Village	7 The Villas of Scioto	8 Eastland Manor	9 Hampton Woods
10	11 Danbury Columbus	12 Oakleaf Village of Columbus	13 United Church Homes	14 Springleaf of Columbus	15 Winchester Station Cooperative Inc.	16 Westerwood
17	18 InCare Suites	19 Restoration Plaza III	20 Wildwood Village	21 Thurber Towers	22 Harrison on 5th by Senior Star	23
24	25	26 The Coventry Senior Living	27 Jaycee Arms	28 Poindexter Towers	29 Lincoln Gardens	30
31	1	2	3	4	5	6

Truck Parking Key: (Indicates which branch the truck will be parked at on the visit date) 6172 E Livingston Ave, Columbus, OH 43232 3224 Northwest Blvd, Upper Arlington, OH 43221 630 S State St, Westerville, OH 43081

Monthly truck schedule example







Therefore, with one truck, Huntington could serve anywhere from 276-552 guests in just one month.

Marketing

Once each individual visit is scheduled it comes down to marketing the event so older adults can sign up. In working with older adults and their independent living facilities it became prominent that they utilize analog methods of marketing through paper fliers, bulletin boards and schedules. Older adults look forward to this method of scheduling and marketing as it is simple and inclusive. Therefore, on top of the trucks visit date being in each living facility schedule, I created a flier for the truck that explains key features and components to the system. Through the enlarged 11" x 17" flier, older adults can note the day the truck is coming, where to sign up, and what they can accomplish on it. They can note it's for all residents not just Huntington customers. In addition, they can note that there is a coffee and Q&A event in the morning of each visit to better explain the initiative in-person and answer more questions.



Exterior features: A low chassis and foldable

ramp for a smooth, accessible entrance

Huntington Pop-Up Truck

Designed to better support older adults in their banking journeys.

Whether you are a Huntington Bank customer looking to complete transactions or receive assistance or you are not a Huntington gustomer and would like to learn more about

assistance, or you are not a Huntington customer and would like to learn more about Huntington services, feel free to sign up for a 30-minute time slot! Sessions are limited to one guest or partnership.

Friday, December 1st Sign-Up Sheet

Name (first and last)	Phone Number	Reason For Appointment (as specific or general as you desire)	Time Slot		
Coffee with	Coffee with Huntington: Information Session + Q&A				
			10:10-10:40 am		
			10:45-11:15 am		
			11:20-11:50 am		
			11:55-12:25 pm		
	Huntington Lunch Break				
			1-1:30 pm		
			1:35-2:05 pm		
			2:10-2:40 pm		
			2:45-3:15 pm		
			3:20-3:50 pm		
			3:55-4:25 pm		
			4:30-5 pm		

Please bring your state-issued ID along with any external materials you might want. If you need to cancel or reschedule your session, please let your living facility coordinator know as soon as possible. Feel free to take a pull tab as a session reminder.

Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck	Huntington Bank Pop-Up Truck
Friday 12/1 from 9:35-10:05 am	Friday 12/1 from 10:10-10:40 am	Friday 12/1 from 10:45-11:15 am	Friday 12/1 from 11:20-11:50 am	Friday 12/1 from 11:55-12:25 pm	Friday 12/1 from 1-1:30 pm	Friday 12/1 from 1:35-2:05 pm	Friday 12/1 from 2:10-2:40 pm	Friday 12/1 from 2:45-3:15 pm	Friday 12/1 from 3:20-3:50 pm	Friday 12/1 from 3:55-4:25 pm	Friday 12/1 from 4:30-5 pm

Pop-up truck flier

Interior features: A rounded

table, comfortable seating, along with an englarged screen, laptop, and tablet for various banking needs.

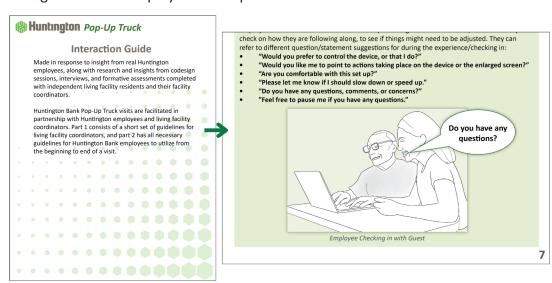
Sign-up sheet

Sign-Up

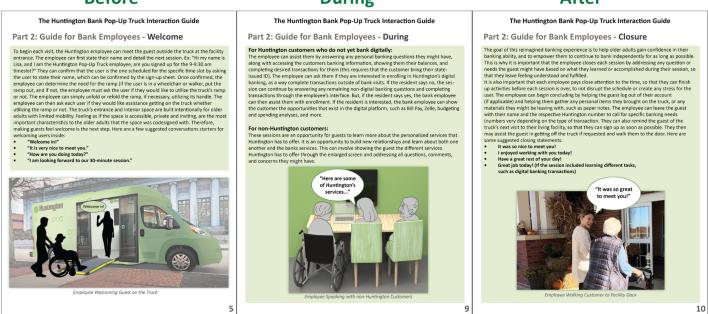
When it comes to signing up it is important to welcome guests who are unable to sign up digitally because that is the reason many are signing up in the first place. In addition to making the sign-up sheet analog just like the marketing flier, it is important that the sheet is large, specifically 11" by 17" so it is easy to read and write. In the sign-up sheet, users can sign up for a 30-minute private session and put their reason for the session being as general or specific as they wish. This is something the bank employee can use to prepare before their visit, or as a conversation starter upon the guests arrival. There are 5 minute breaks between each session to account for the extra time it could take to conclude a session, and for the time necessary to enter/exit the truck. There is also a 30-minute lunch break for bank employees in the middle of the 12 sessions that range from 9:35 am to 5 pm. The sign-up sheet encourages guests to bring their state-issues ID and other necessary materials they might need, such as their phone. Finally, each sheet will have pull tab reminders for guests to take with them. As it was learned in a codesign session I ran during the research phase, older adults are more likely to show up for a scheduled event when they have a reminder. Specifically, I had scheduled a session with 4 older adults over the phone and only one of them showed up. The next time around, I went to the living facility and gave each individual a paper reminder, and all of them showed up. Therefore, the pull tabs serve as a reminder for the residents to take with them back to their respective apartments and nudge them to mark their individual session time in their calendars.

Visit Facilitation

Finally, it comes down to the visit as a whole. You cannot fully design an interaction between people, specifically what they say and do, but you can create a guide for employees and facility coordinators to utilize to better understand the truck's initiative and its necessary components. The guide was made in response to codesign sessions with older adults and interviews with Huntington bank tellers. Facility coordinators can read their 2-page guide to note the significance of their role to schedule monthly visits, hang up fliers, and keep the signup out. Employees can read their 8-page guide to better understand components and important interactions that occur before during and after a session. It helps them better understand the perspective of different guest types. For many older adults the relationships they build with employees at their bank is what keeps them there, which is why it is important the employee is patient and adaptable to their needs, helping them get on the truck and go about their sessions in a learning method that best works for them – sometime this could mean the older adults might want the employee to complete all transactions for them.



Before During After



Interaction guide

To view the entire interaction guide, please click the link below:

https://drive.google.com/file/d/1Cor0I-4blCWDT8Wp3WjJgfDfl5GvRdQ6/view?usp=drive_link

Final Design

Huntington Pop-Up Truck



The Huntington Bank Pop-Up Truck

The Huntington Bank Pop-Up Truck aims to offer a more personalized banking experience by bringing in-person services and employees directly to older adults. Starting in Columbus, the truck will visit 23 independent living facilities monthly, welcoming all residents regardless of their bank affiliation.

For those unable to sign up online, each facility will provide a sign-up sheet for private 30-minute truck sessions addressing their banking needs. The truck ensures accessibility with features like a low chassis and ramp for mobility aids. Inside, it's welcoming and equipped with storage, comfortable seating, a large screen, and a setup for face-to-face interaction and collaboration. The onboard employee uses the truck's interaction guide to assist with typical bank services (except those involving cash). Whether assisting with transactions, providing answers, or sharing Huntington services, the employee caters to customers' preferences.

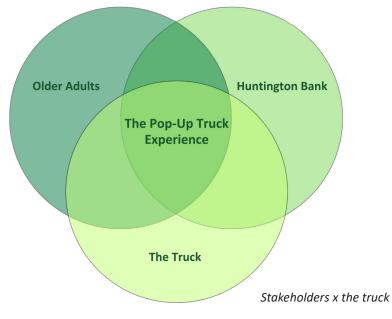
The Huntington Bank Pop-Up Truck initiative empowers older adults to bank independently while fostering customer loyalty and forging new relationships for Huntington Bank.

Impact & Reflection

The Impact

Now that we know all the components to the pop up truck developed and the various scenarios of use involved in its system, lets talk about its impact for the two main stakeholders: both Huntington Bank

and older adults.



In meeting with Huntington strategists early on (referencing page 12 in the research section), I learned that Huntington has expressed a desire to increase customer loyalty in the financial service space, specifically in digital services. They recognize this can be done by getting the basics right, lowering customer friction points and personalizing their experience to create a better connection, making them more likely to take on morer Huntington services. In keeping Huntington's strategy in mind, it can also be noted that Huntington branches are continuing to close, specifically they are planning to close 34 branches in 2024, and in knowing that a traditional branch can cost about \$600,000-800,000 a year to run, Huntington technically could have an extra 27 million dollars in funds to redistribute next year.

Huntington closing 34 branches in 2024

Traditional branches can cost \$600,000-\$800,000 a year.



Huntington branch closures

And while I'm sure like most banks, people are looking to continue to push these funds into digital services, I challenge Huntington to disrupt this definition of digital investment into more accessible services that could help increase many of their current customers' loyalty and better include them in banking innovation.

The impact would be enabling older adults, which hold about 1/3 of our nation's wealth to continue to bank independently for as long as possible, strengthening their customer loyalty and building new customer relationships for Huntington along the way.



Older adults utilizing the truck

Project Reflection

In looking back at this semester-long capstone project, I have learned and grown so much as a designer. I was constantly challenged to reflect upon my research through different perspectives, and to continue to test each of my ideas and their various components. I would love the opportunity to continue to develop this project with Huntington, utilizing more research and resources to refine its features, lower costs, and expand the service into different locations. I still have a lot to learn when it comes to visually communicating a concept and its function, and I look forward to improving on this while completing my research distinction. I think the pop-up truck concept could benefit from more iteration on the look and components of its marketing and sign-up sheets. How can we market this concept beyond independent living facilities? Should the exterior of the truck say more about its function? Should there be digital advertisements for people to note who do not live in an independent living facility? What type of activities and assistance could we provide living facility residents with on days the truck is not visiting? These are all important questions I have to continue to push this project further with more time. Overall, I am incredibly grateful for this opportunity and I am proud of the skills I have developed and elevated in these short few months.

Project Development References

Distribution of wealth in US by age. Distribution of Wealth in US by Age. (n.d.). http://www.freeby50.com/2012/09/distribution-of-wealth-in-us-by-age.html

Hartfeil, G. (2022, May 7). Are your bank's branches too small to survive? The Financial Brand https://thefinancialbrand.com/news/banking-branch-transformation/bank-branch-roi-deposits-profitability-74386/

Huntington Bank to close 34 branches, including 3 in Cleveland, in 2024 ... (n.d.). https://totalnews com/huntington-bank-to-close-34-branches-including-3-in-cleveland-in-2024-cleveland-com/

Links for market research & inspiration:

Structure

- 2023 Ram ProMaster® 3500 Cutaway 159 WB EXT 104 CA | Specs, MSRP and More (ramtrucks.com)
- A Cutaway in Name Only | Frontrunner | Billerica (frontrunnerbus.com)
- Cab to Axle Measurement Quick Guide | Transit

Appearance

- https://www.bulkapothecary.com/aspen-grass-fragrance-oil/
- https://bloomr.ae/products/eucalyptus-arrangement-in-ceramic-vase-3196-3197-3198
- https://www.prestigekitchens.com/countertops
- https://www.lowes.com/pd/Top-Choice-Maple-Plywood-Actual-0-703-in/3658448
- https://www.safcoproducts.com/products/silver-papier-silver%20papier
- https://www.parrotforums.com/threads/grass-identification.89303/
- https://www.dreamstime.com/stock-images-twirl-image241314
- https://www.schemecolor.com/go-green-gradient.php
- https://www.potterybarn.com/products/dolores-9-drawer-dresser-mp/?catalogId=84&-sku=7336463&cm_ven=PLA&cm_cat=MSN&cm_pla=Furniture%20%3E%20Dressers%20%26%20
 Armoires&adlclid=f3a188cef91a1bed4673edf05d58ece1&cm_ite=7336463_458015199&msclkid=f3a188cef91a1bed4673edf05d58ece1
- https://weandthecolor.com/velo-chair-jan-waterston/78010
- https://www.amazon.com/New-Pacific-Direct-Fabian-Accent/dp/B081H7J62L
- https://www.amazon.com/Ahzhlb-Industrial-Terrazzo-Suspension-Adjustable/dp/B09WQJG6QQ
- https://www.wayfair.com/furniture/pdp/brayden-studio-italian-modern-5-drawers-chest-w000111560.html
- https://pngtree.com/freepng/textured-gray-background-with-abstract-waves-twists-and-lines-vector 10049445.html

Links for external design components:

Laptop

https://grabcad.com/library/hp-elitebook-1

Foldable Ramp & Exterior Structure

https://www.frontrunnerbus.com/

Wheelchair

https://grabcad.com/library/wheelchair-95