Human-Centered Design Solutions

Spring 2019

**Triangle Residential Options
for Substance Abusers**

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**Triangle Residential Options
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Mission Statement:

TROSA is an innovative, multi-year residential program that ==enables substance abusers== *to be productive, recovering individuals* ==by providing comprehensive treatment,== *work-based vocational training, education, and continuing care.*

Follow the Journey.

Explore our roadmap and get started!

Executive Summary.

Welcome to our team's journey with TROSA. Using the human-centered design (HCD) methodology, we made an effort to improve residents experience at TROSA. Our final design solution is a redesigned values-based manual for TROSA. This manual will help TROSA take the first step to move from a rules-based organization to a values-based organization, which we believe will ultimately lead to less attrition within the organization.

We were initially presented with the following problem statement: "how might TROSA better support and retain residents during the first 90 days?" We needed to figure out what was happening during these first 90 days and what was causing individuals to leave.

With these questions in mind, we came to TROSA and conducted over 20 interviews with both residents and employees. We synthesized the interviews, identified key moments that matter for residents, and created our initial TROSA journey map. This journey map shows a linear process of recovery at TROSA: from rock bottom, to relearning and redeveloping, and ultimately to fulfillment. During these phases, residents experience three critical moments that matter: (1) receiving the rules and procedures manual (2) receiving a consequence for breaking a rule and (3) searching for help to cope with a challenging situation.

However, recovery in TROSA is seldom linear. Residents are constantly relearning and redeveloping and these moments that matter occur at different times for every resident. As a result, we incorporated our insights and revised our journey map to focus on the cyclical nature of recovery and the disperse occurrences of moments that matter. We've also realized that these moments that matter represent points of uncertainty in which residents diverge in their experiences based on how well they understand the purpose of the rules, procedures, and community in TROSA.

Those who have a clear understanding tend to experience these moments as bright spots and opportunities to improve themselves, while those who don't experience these moments as pain points and lose faith in their recovery. In order to foster a consistent "bright spot" response to these moments that matter, we recognized that it was important for our design solution to improve residents' and employees' understanding of the purpose of the TROSA way. Therefore, promoting better understanding of TROSA's values, the fundamental purpose of the organization, was the central focus of our design process.

We brainstormed different solutions, including intervention toolkits for the employees, rescheduling staff office hours, and a redesigned manual for TROSA. After examining the desirability, effectiveness and feasibility of each solution, we decided to hone-in on the idea of a redesigned value manual. This new manual will be a values-based guidebook for both TROSA residents and employees. We believe this new manual can initiate a culture change in the organization, transitioning TROSA from a rules-based organization to a values-based organization, which will ultimately lower attrition.

To help TROSA develop and introduce this values-based manual, we came up with a detailed implementation plan with suggestions of best practices. We've also improved the current TROSA dashboard to facilitate better monitoring and evaluation during the implementation process, which helps TROSA further refine and improve the manual.

We are thankful for the openness and responsiveness from both employees and residents at TROSA that helped us immensely. We're inspired by all the stories and insights we've heard along the way and are deeply appreciative. We would also like to thank Tom, Blythe and Meg for guiding us through the HCD process and for providing insightful advice along our TROSA journey.
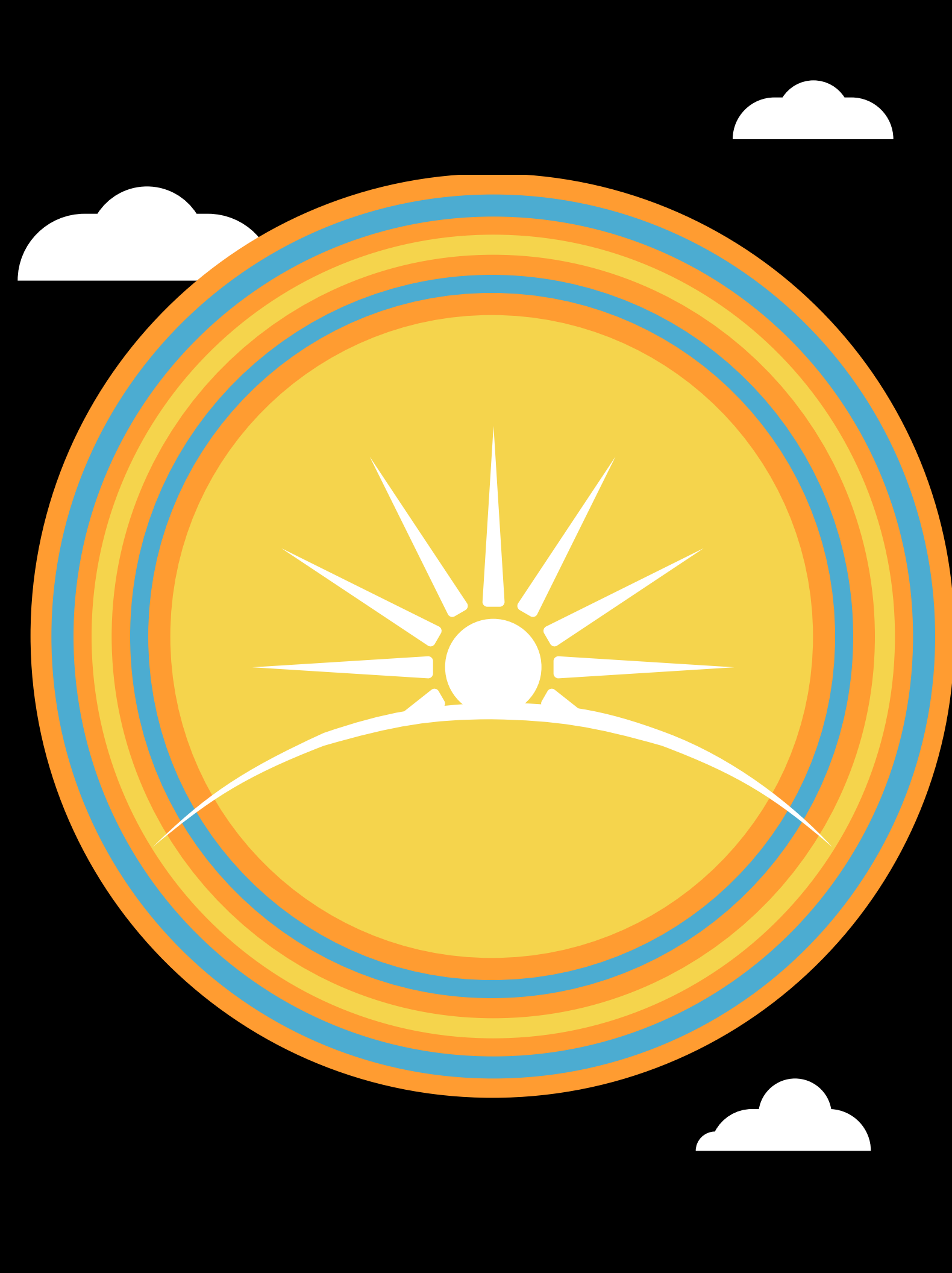
Hi! We're Team TROSA!

(or that's just what our professors call us.)

We are four graduate students in the Sanford School of Public Policy. Our journey began in a classroom at the Sanford School of Public Policy, where we met and were first introduced to the concept of Human Centered Design.

But what is Human-Centered Design...

Human Centered Design
is a collaborative approach to solving problems.

On the first day of class, we learned that Human Centered Design (HCD) is a creative approach to solving problems. HCD focuses on understanding the human experience within organizations in order to design solutions that suit the needs of those people. Designers must operate with *empathy*—in order to design useful solutions, designers have to really understand the people who will benefit from that solution.

The HCD process begins when an organization identifies a problem they are having. From there, designers begin asking questions to discover how the problem is affecting the customers and employees in an organization. Next, the team will design a solution that focuses on solving the organization's problem by improving the customer experience. Finally, the team delivers the design to the organization.

DISCOVERY

The Discovery Phase consists of research that uncovers the unmet needs of an organization's constituents, synthesis to detect patterns and themes in constituents' experience and documentation of key insights.

DESIGN

The Design Phase consists of brainstorming to transform insights into ideas, cocreation to develop and test solutions with constituents, and refining to identify solutions that have been proven to postively impact the constituents' experience.

DELIVER + MEASURE

The Deliver + Measure Phases includes introducing proven solutions to the organization, measuring success and tracking continuous improvement in the constituents' experience, and incorporating feedback from constituents.

Human Centered Design is not:

A process driven by what is *technologically feasible* to create;

A process driven by *hypotheses* and instincts about what people want;

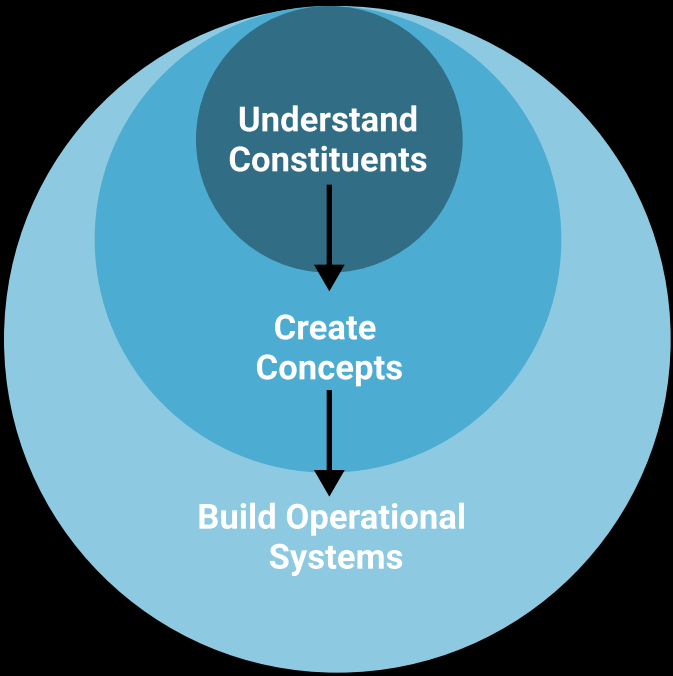A process *focused on optimizing* operations (with more efficient processes).

CONFUSED?
We were too.
This <u>might</u> help.

Traditional businesses and organizations do not operate with their constituents in mind. Leaders strategize and identify their operational goals, often focusing on how they can maximize their sales and profits. In order to meet these goals, leaders create concepts and models that they hope lead to success. Businesses and organizations then tailor these concepts and models to the proximate environments and constituents they operate within.

Design thinking shifts this paradigm upside-down. Rather than brainstorming goals and adapting concepts and models to constituents, design thinking seeks to understand the constituents first. Once constituents are understood, businesses and organizations can develop concepts and build operating systems.

Understand Constituents

↓

Create Concepts

↓

Build Operational Systems

Human Centered Design is used because it is:

Disciplined.
A structured approach to transformative innovation and can be used to make meaningful impact on hairy, system challenges at a high level.

Agile.
A flexible approach to incremental innovation and can be used to identify high impact, targeted and discreet wins and refine designs through evaluative testing.

Non-linear.
A non-traditional approach to problem solving. While it can be used to achieve new solutions, it also shifts mindsets and opens up a new way of thinking.

Collaborative.
A participatory journey with co-created outcomes. The "human" means all constituents - citizens, employees, communities.

Tangible.
A concrete way to democratize insight through visual thinking, mapping, and prototyping.

Iterative.
A measurable process to constantly evaluate and visibly improve outcomes.

> *"HCD begins where traditional management models end."*

On our first day of class, we also learned that

Design starts with a question, not an answer.

After sharing this knowledge, our professors were able to shift the focus of our class from introducing the concept of Human Centered Design to presenting which client each student team would be working with for the duration of the semester. One by one, representatives from the class's five Design teams claimed a document describing their organization and the challenge they would be addressing over the course of the 14 week semester. Our team was matched with Triangle Residential Options for Substance Abusers, also known as TROSA. In our overview brief, we learned about:

Our Human Centered Design challenge and area of focus at TROSA.

Our Challenge:
A large percentage of individuals going through treatment at TROSA leave within the first three months. What is happening in this onboarding to 90-day mark process that is failing these people?

Our Area of Focus:
How might we better support and retain residents at TROSA during their first 90 days?

In addition to providing us insights about our human centered design challenge and our area of focus while we work with TROSA, our professors provided our team with brief background information about TROSA. This included a short background, vision, customer and employee overview to get us started on our HCD journey. The information our professors shared with us is highlighted below.

Background
TROSA is a licensed, multiyear recovery community. Each day, TROSA gives more than 500 male and female substance abusers the tools and support they need to be productive, recovering individuals by providing counseling/mentoring, workbased vocational training, education, and continuing care. TROSA provides these services and housing, food, clothing, and personal care items to every resident at no charge.

Vision
Enable substance users to be productive, recovering individuals.

Customers
Adults 18 years or order suffering from a substance use disorder.

Employees
A mix of both administrative employees and graduates of TROSA that continue to be involved and work in the TROSA community.

With our clients assigned, a short overview of our client at-hand and a general understanding of human-centered design, our professors tasked us with getting an even better understanding of TROSA before we met with our point-of-contact at the organization and started with our work.

TROSA's 4 Social Enterprises incude Moving + Storage, Holiday Tree Lots, Thrift Store, and Lawn Care.

LEARNING ABOUT
Triangle Residential Options for Substance Abusers (TROSA)

Through more investigation, we learned that TROSA is an innovative, multi-year residential program that enables substance abusers to be productive, recovering individuals by providing comprehensive treatment, work-based vocational training, education, and continuing care. The organization uses a therapeutic community approach which focuses on the *whole person* and *overall lifestyle changes*, not simply abstaining from drug and alcohol use.

During a resident's two-year experience, they work at one of TROSA's five vocational sites to develop skills that they can use once they graduate. The residents can also take classes and receive certifications while they are in the program. After the resident's graduate, TROSA provides continued care to help graduates remain sober, employed, and crime-free.

According to TROSA's 2017-18 Annual report,
TROSA serves a population where

360 *residents were previously homeless;*

421 *residents were previously unemployed;*

783 *residents were formerly incarcerated;*

859 *residents were previously uninsured;*

212 *residents have no GED/high school diploma.*

With all this in mind, we were able to begin our work to address TROSA's challenge.

BEGINNING OUR

DISCOVERY

PROCESS.

OVERVIEW:

The Discovery Phase is the longest and most important part of the HCD process.

During this stage, designers conduct lengthy interviews with customers and employees about the organization. After conducting interviews, the team synthesizes their findings and identifies key themes and trends. They note bright spots and pain points for the customers and employees and identify the big moments that matter for both groups of people. Ultimately, the team creates a journey map to delineate the customer and employee experience within the organization. This journey map serves as the foundation for the forthcoming design stage.
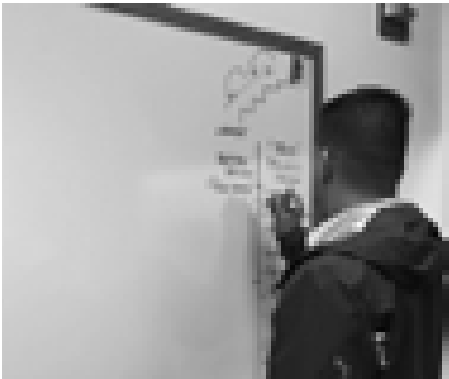
RESEARCH.
Uncovering Unmet Needs.

SYNTHESIZE.
Detecting Patterns and Themes.

DOCUMENT.
Visualizing Insights.

Our research method consists of:

4-6
Resident Interviews (min.)

4-6
Employee Interviews (min.)

60
Minute interviews

1
Hour of site observation (min.)

2
Conducted interviews in teams of 2

14
Days to complete

To complete HCD research, design teams are required to meet an organization's leadership team and schedule 4-6 interviews with residents and employees. In order to better understand the organization and to build empathy with the customers and employees, interviews should happen on site. Designers are taught to ask open-ended questions and to observe unspoken behavior that reveals deeper thoughts, feelings, and motivations.

After each interview, designers quickly debrief to discuss any major themes and notable outliers heard during the interviews. Design teams transcribe each interview and make note of powerful quotes that capture important parts of the user experience. After all interviews are complete, design teams come together for a long synthesis meeting to develop top observations and takeaways and to highlight patterns of pain points and bright spots.

Once synthesis is complete, design teams visually document takeaways and patterns by creating a user journey map. The map shows high-level journey phases, steps and touchpoints, documents the customer and employee perspective, and highlights top insights and moments that matter.

Best practices we utilized during our discovery include:

Studying users in context, on-site at TROSA residences and job locations;

Asking open-ended questions to elicit

conscious, known and spoken needs of residents and employees;

Recognizing and noting unspoken behaviors during interviews because it reveals deeper thoughts, feelings, and motivations residents and employees have;

Actively listening to users and demonstrating a present and open mind to their experiences and perspectives.

ROCK BOTTOM | RELEARNING/REDEVELOPING | FULFILLMENT

1 ROCK BOTTOM | 2 APPLY + INTERVIEW | 3 INTAKE | 4 INTERN | 5 | 6 | 7 | 8

RELAPSE

We heard stories

that first day allowed us to better understand the human experience of recovery. One stands out:

"I hit rock bottom, I had lost all my friends and family and my job and decided I needed a change. I found out about TROSA by doing a quick search online. I called to set up an interview with the intake office. During the interview, I was asked a bunch of questions about why I wanted to come and I was given information about what TROSA would do for me. After the interview, I was admitted. I came to TROSA and didn't really understand the process. I didn't listen to people and I didn't care about following the rules. I made it 18 months, and eventually started using drugs again, so I was kicked out the program. After a few months, I hit rock bottom again and decided to come back. This time was different, I knew that I didn't have all the answers and that I needed to listen if I was actually going to recover. As part of my restart contract, I was working in the kitchen and a bunch of old friends, both residents, and employees, came in and told me how happy they were to see me back here. They let me know they had my back. That's when I realized I had a community of people who care about me and a community of people I care about. It was the first time I felt that way in my life. That was the moment that I really committed to recovery and I made it through. I'm still sober today."

While this and every story is unique, they share many common themes that we continued to find throughout our discovery process.

Defining the recovery experience.

TROSA provided our team with an initial problem statement to guide our discovery: "how might TROSA better support and retain residents during the first 90 days?" Our team visited the organization to see the physical space and to begin building a partnership with the leadership team.

TROSA was founded in 1994 by Kevin McDonald. Mike explained that Kevin founded TROSA after he had been through a recovery program himself. Kevin wanted to make sure that TROSA used a therapeutic community model to holistically support residents during their time at TROSA and after they graduated. As part of this model of support, TROSA is staffed almost entirely by graduates of the program.

During our first meeting, we met with the Associate Director of Program Operations, Mike Balsamo, who graduated from TROSA in 2011, and received a tour of the main TROSA property.

Mike walked us through TROSA's theory of change which states that during a resident's time at TROSA, they will have opportunities to relearn responsibility and to reflect on their challenges and triumphs. Increased responsibility and time for reflection will lead to behavior changes, which will ultimately lead to a better life.

Mike also walked us through his journey to recovery and introduced us to several other staff members who did the same. We left this meeting with a better understanding of the human experience of recovery and inspired to learn more from residents and employees.

Journey Map

Aligning the Resident & Employee Experience

After our initial meeting, we split into teams of two and conducted interviews with residents and employees. We talked to a total of 20 people within the TROSA organization. Our interviews provided us with four major takeaways:
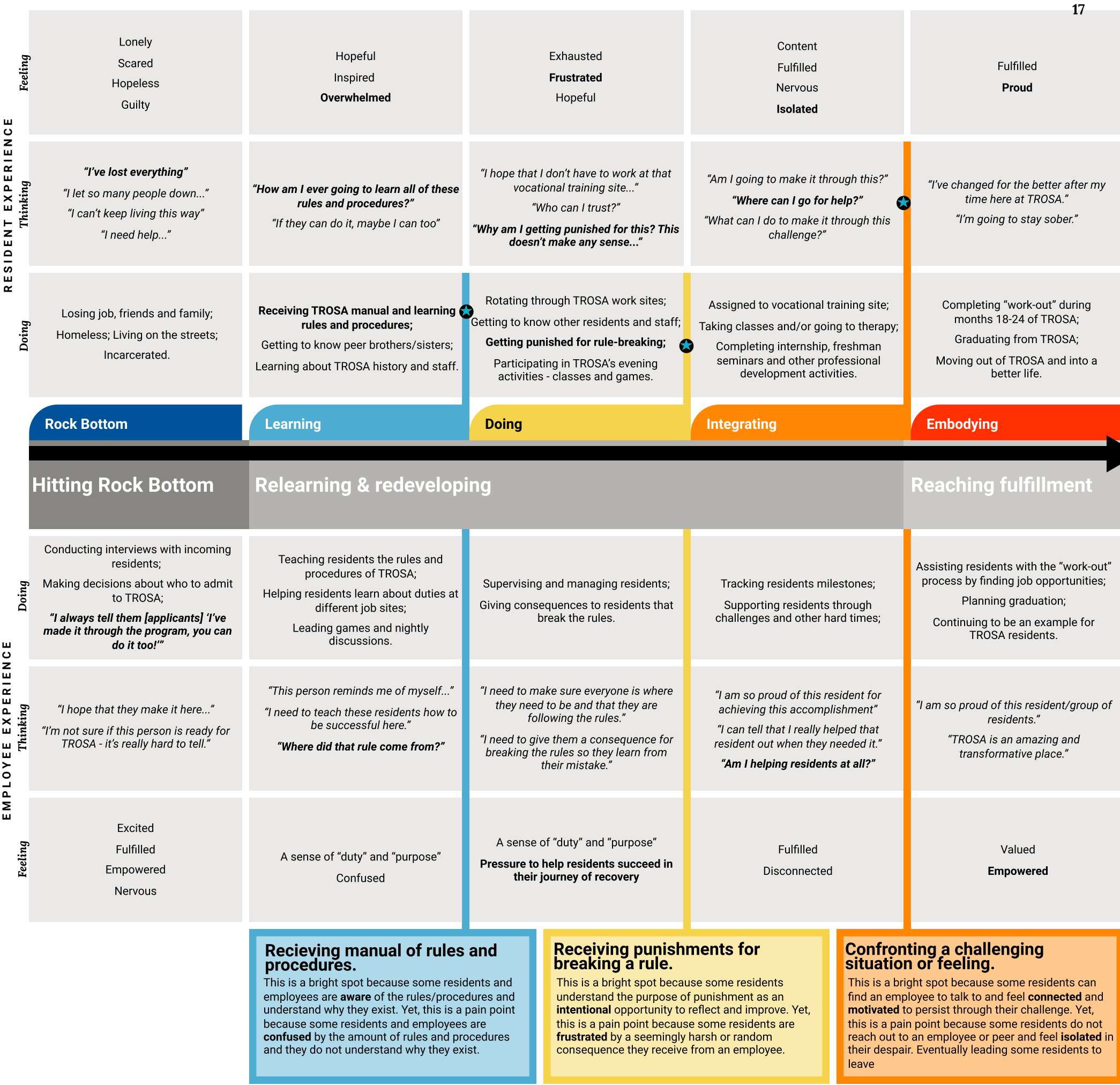
Rules and Procedures are either helpful OR harmful: We found that residents that have clarity around the rules and procedures understand why they exist and how they will help in recovery. On the other hand, residents that are confused by the rules and procedures feel overwhelmed and think the rules are arbitrary.

Consequences are either helpful OR harmful: We found that some residents understand that punishments as uplifting opportunities for reflection and growth. Other residents are frustrated by punishments and the consequences seem harsh or random.

Connecting to others matters for recovery: We found that some residents find an employee to talk to in a moment of despair, and this connection motivates the resident to keep going. Other residents do not reach out for help, and feel isolated and unsupported during moments of despair.

Moments of clarity are paramount for successful recovery: Every graduate we spoke to had a moment of clarity while at TROSA. A moment of clarity represents a time when a person surrenders to the TROSA way and is willing to let go of their old life. After this moment, residents develop faith in the process and this helps them to keep going.

The journey map here highlights those key takeaways. Additionally, the journey map shows the phases of a resident's journey and documents the residents and employees perspective. Most importantly, it notes the three most critical moments that matter in a resident's experience at TROSA.

RESIDENT EXPERIENCE

Feeling

Lonely Scared Hopeless Guilty	Hopeful Inspired **Overwhelmed**	Exhausted **Frustrated** Hopeful	Content Fulfilled Nervous **Isolated**	Fulfilled **Proud**

Thinking

"I've lost everything" *"I let so many people down..."* *"I can't keep living this way"* *"I need help..."*	***"How am I ever going to learn all of these rules and procedures?"*** *"If they can do it, maybe I can too"*	*"I hope that I don't have to work at that vocational training site..."* *"Who can I trust?"* ***"Why am I getting punished for this? This doesn't make any sense..."***	*"Am I going to make it through this?"* ***"Where can I go for help?"*** *"What can I do to make it through this challenge?"*	*"I've changed for the better after my time here at TROSA."* *"I'm going to stay sober."*

Doing

Losing job, friends and family; Homeless; Living on the streets; Incarcerated.	**Receiving TROSA manual and learning rules and procedures;** Getting to know peer brothers/sisters; Learning about TROSA history and staff.	Rotating through TROSA work sites; Getting to know other residents and staff; **Getting punished for rule-breaking;** Participating in TROSA's evening activities - classes and games.	Assigned to vocational training site; Taking classes and/or going to therapy; Completing internship, freshman seminars and other professional development activities.	Completing "work-out" during months 18-24 of TROSA; Graduating from TROSA; Moving out of TROSA and into a better life.

Rock Bottom	**Learning**	**Doing**	**Integrating**	**Embodying**

Hitting Rock Bottom	**Relearning & redeveloping**			**Reaching fulfillment**

EMPLOYEE EXPERIENCE

Doing

Conducting interviews with incoming residents; Making decisions about who to admit to TROSA; ***"I always tell them [applicants] 'I've made it through the program, you can do it too!'"***	Teaching residents the rules and procedures of TROSA; Helping residents learn about duties at different job sites; Leading games and nightly discussions.	Supervising and managing residents; Giving consequences to residents that break the rules.	Tracking residents milestones; Supporting residents through challenges and other hard times;	Assisting residents with the "work-out" process by finding job opportunities; Planning graduation; Continuing to be an example for TROSA residents.

Thinking

"I hope that they make it here..." *"I'm not sure if this person is ready for TROSA - it's really hard to tell."*	*"This person reminds me of myself..."* *"I need to teach these residents how to be successful here."* ***"Where did that rule come from?"***	*"I need to make sure everyone is where they need to be and that they are following the rules."* *"I need to give them a consequence for breaking the rules so they learn from their mistake."*	*"I am so proud of this resident for achieving this accomplishment"* *"I can tell that I really helped that resident out when they needed it."* ***"Am I helping residents at all?"***	*"I am so proud of this resident/group of residents."* *"TROSA is an amazing and transformative place."*

Feeling

Excited Fulfilled Empowered Nervous	A sense of "duty" and "purpose" Confused	A sense of "duty" and "purpose" **Pressure to help residents succeed in their journey of recovery**	Fulfilled Disconnected	Valued **Empowered**

Recieving manual of rules and procedures.
This is a bright spot because some residents and employees are **aware** of the rules/procedures and understand why they exist. Yet, this is a pain point because some residents and employees are **confused** by the amount of rules and procedures and they do not understand why they exist.

Receiving punishments for breaking a rule.
This is a bright spot because some residents understand the purpose of punishment as an **intentional** opportunity to reflect and improve. Yet, this is a pain point because some residents are **frustrated** by a seemingly harsh or random consequence they receive from an employee.

Confronting a challenging situation or feeling.
This is a bright spot because some residents can find an employee to talk to and feel **connected** and **motivated** to persist through their challenge. Yet, this is a pain point because some residents do not reach out to an employee or peer and feel **isolated** in their despair. Eventually leading some residents to leave

Let's recap.

This first journey map reflects a detailed linear process of recovery that corresponds to the linear journey of recovery we referenced earlier. We were able to identify three phases within the relearning and redeveloping stage. They are learning, doing, and integrating. Within these phases, residents experience three critical moments: (1) receiving the manual of rules and procedures (2) receiving a consequence for breaking a rule and (3) confronting a challenging situation.

After creating this initial journey map, our team reflected and had two major takeaways:

1. You can see from the "moments that matter" part of the journey map that for some residents and employees these moments are bright spots, and for other residents and employees these are pain points.

2. We also realized that recovery is not a linear process, as this journey map suggests. Rather, the learning, doing, and integrating stages happen in a cyclical manner and the moments that matter occur at different times for every resident.

In order to acknowledge our takeaways, we decided to refine our Journey Map on the next two pages.

"

The first time I came to TROSA it was different because I had just come from prison. I didn't talk to anyone, I had an attitude, and I was always in trouble. I made it through the first time and graduated, but about three weeks later, I started getting high again. There was one moment that I thought I wasn't gonna wake up but I did. And that's when I realized, I needed to come back to TROSA and really figure it out this time. I need to listen to people this time, I need to follow the rules, I need to relearn the behaviors that will help me to stay sober in the long run. I'm ready to have my life back.

Refined Journey Map

The Cyclical Experience at TROSA

We created a new journey map to reflect the cyclical nature of recovery and to highlight the impact of the moments that matter. As you can see, when residents experience these moments that matter as pain points, they are more likely to leave the program (denoted by black arrows on the journey map). However, when they experience these moments that matter as bright spots, they are more likely to stay (denoted by white arrows on the journey map).

Leaving TROSA; potentially relapse and/or reincarcerated

Rock Bottom

- Losing job, friends and/or friends
- Homeless; living on the street; Breaking the law to get drugs
- Incarcerated

Learn

- Receiving manual and learning TROSA rules and procedures
- Getting to know "peer brothers and sisters
- Learning about TROSA's history and meeting staff members

Integrate

- Assigned to vocational training site
- Search for help during classes and therapy
- Completing TROSA internship and freshman seminars

Do

- Rotating through vocational training sites
- Receiving punishments for breaking the rules
- Participating in theraputic activities
- Establishing relationships with other residents and staff

Embody

- Completing "work-out" phase for months 18-24 in program
- Graduating from TROSA
- Moving out of TROSA and into a better life
- Continuing care and personal development

Legend:

Life Stage	Moment	Moment that Matters
Learn	Learning about TROSA's history and meeting staff members	Receiving manual and learning TROSA rules and procedures

Hitting Rock Bottom   **Relearning and redeveloping**   **Reaching fulfillment**

Moments that Matter

1: Receiving manual of rules & procedures

This is a bright spot because some residents and employees are **aware** of the rules/procedures and understand why they exist. Yet, this is a pain point because some residents and employees are **confused** by the amount of rules and procedures and they do not understand why they exist.

#2: Receiving punishment for rule-breaking

This is a bright spot because some residents understand the purpose of punishment as an **intentional** opportunity to reflect and improve. Yet, this is a pain point because some residents are **frustrated** by a seemingly harsh or random consequence they receive from an employee.

#3: Searching for help to confront a challenge

This is a bright spot because some residents can find an employee to talk to and feel **connected** and **motivated** to persist through their challenge. Yet, this is a pain point because some residents do not reach out to an employee or peer and feel **isolated** in their despair. Eventually leading some residents to leave

Key Takeaways
from the Discovery Phase.

You can see from the "moments that matter" part of the Journey Map that for some residents and employees these moments are bright spots, and for other residents and employees these are pain points. Bright spots represent a moment when residents have faith in the process and this leads to recovery. Pain points represent when residents lose faith in the process and this leads to attrition. Moving into our design phase, we recognized that we need a solution that will help turn these moments into bright spots for all residents and all employees to ensure that more residents stay.

WAIT, STOP.
We know "what", but now we need to transition to "why".

Our three moments that matter are turning points scattered along the residents' relearning and redeveloping process. They are associated with both "bright spots" and "pain points" for residents, sometimes bringing residents to a moment of clarity, sometimes pushing them away from the TROSA way of life. Ignored and left untouched, this uncertainty of inconsistent responses poses a substantial risk for TROSA that could lead to worse attrition.

After further discussion and examination, we've come to realize that those who experience these moments as "bright spots" understand the purpose of the rules, consequences, and connection while those who experienced these moments as "pain points" do not.

In order to foster a consistent "bright spot" response to the rules, consequences, and connection, in other words to turn "pain points" to "bright spots," it is essential for TROSA to help residents better understand the purpose, the VALUES behind the TROSA way.

The stories to the right illustrate the importance of understanding and connecting to the TROSA values during the recovery process and our takeaways from those stories are listed below.

If residents understand why the rules and procedures exist and how they will help them during recovery they will be more likely to follow them.

If residents understand why they are receiving consequences they will use their punishments as a learning experience and an opportunity for growth.

Finally, if residents understand that they are not alone in their struggles, they will be more willing to ask for help in these moments.

We've also realized that even though these "bright spots" and "pain points" are primarily focused on residents' experience, each of the moment that matter are in fact touchpoints between residents and employees.

Therefore, the existence of inconsistent residents responses and "pain points" also demonstrates a disconnect of employees from a consistent value system within TROSA.

Therefore, the key insight we've taken from our discover process to our design is a focus on helping both residents and employees better understand and connect to TROSA's values.

"

I came to TROSA having trouble setting boundaries for others and for myself. We have this rule of "passing on information" which requires residents to tell the staff when someone else breaks a rule. By sticking to this rule, I'm learning that our recoveries here are not just personal but also communal and that we have to be responsible for others and for ourselves. In this way I'm slowly building the confidence I need to set boundaries for myself that keep me from relapsing. That's why no matter how others judge me for standing firm with the rules here, I'm following them for myself.

"

I came back to TROSA as a restart and was on my 30-day contract. As part of that contract, I had to fold laundry by myself for several hours each day. At first, I was frustrated by this consequence because it was difficult and I didn't have anyone to talk to. But the alone time gave me a lot of time to think. I realized that the contracts are there to give us (residents) the time and space we need to really reflect and grow from our past mistakes. I thought about what I put people I loved through and what I put myself and my body through. I thought about what I was doing here and what I wanted to get out of this experience. In that moment, I knew I wanted to take this seriously.

"

When I finished my internship, I was assigned to a work post that makes me so uncomfortable. Everyday seems to be a struggle. I'm down all the time and I dread coming to work here. I was on the brink of breaking down so I reached out to a staff member and told her how I was feeling. She comforted me and told me that learning to deal with being uncomfortable is an important lesson for me to learn during recovery. She reminded that I was also learning to be more resilient going through these difficult moments and this resilience would be of immense help when I'm dealing with other difficult moments in my life. Her words made me feel assured and uplifted and I was motivated to carry on my recovery here at TROSA.

NOW WE ARE READY TO

DESIGN

OVERVIEW:

The design stage starts after the designers have identified the most important moment that matters from stage one.

Typically, designers will focus on a moment that is a pain point for customers and employees. From there, the team will create a needs statement to capture what the customers and employees need that they are not currently getting from the organization. The team will brainstorm several design solutions that can address the unmet needs of the customers and employees. The team will co-create designs with customers and employees, create mock-ups of designs, and determine which designs are desirable and feasible. Ultimately, the team will decide on a design solution that best meets the needs of the customers and prepare for the final stage.

IDEATE.
Translating Insights into Ideas.

PROTOTYPE.
Building & Testing with Users.

REFINE.
Developing Proof of Concept.

IDEATE!
It's time to brainstorm.

We learned in class that during ideation,

> *[the focus should be on] translating insights into ideas.*

In our ideation process, we identified a needs statement to anchor the purpose of our solutions; we drew out selected solutions in a series of steps (*storyboarding*) to better understand how a solution will fit into the experience of residents and employees; and finally we assessed our top design solutions based on feasibility and effectiveness and agreed on a final design solution.

Developing 'Needs' Statements.

Keeping our insights from our discovery journey in mind, we understand that it is critical for us to first identify and specify the needs of TROSA residents and employees. This will serve as a guideline and target for our solutions. Our insight of residents' and employees' insufficient understanding of consistent values led us to specify the following needs statements.

Residents NEED a way to understand and connect to the TROSA values and way of life.

By coming up with design solutions that help residents better understand and connect to the TROSA values and way of life, we seek to enable residents to understand the purpose, the WHY behind the rules, consequences, and the necessity of connection within TROSA, therefore motivating them to follow rules, learn from their mistakes, and seek help when in need.

Employees NEED to understand, communicate, and embody the TROSA values and way of life.

By coming up with design solutions that help employees understand, communicate, and embody the TROSA values and way of life, we seek to encourage employees to send out consistent values-based messages, foster a culture of trust, and better assist residents during their journey of recovery.

Storyboarding.

To better understand how an idea of solution will fit into the resident and employee experience, we brainstormed some design solutions and imagined the user scenario as a story with characters, plot, conflict, and resolution by individually drawing different scenes on six sticky notes.

This enabled us to have an idea of how our design solution will be used and take effect in different circumstances that a resident and employee might find themselves in.

We then shared our individual stories and discussed their similarities and differences. At the end of our conversation, we developed three potential design solutions that will fit into the TROSA resident and employee experience best while addressing residents' and employees' need to better understand values. Our potential solutions include:

1. *Redesigning the rules/procedures resident manual to a values-based guidebook;*

2. *Restructuring TROSA's schedule to allow employees to talk with residents about the values of the organization;*

3. *Designing a employee intervention toolkit to provide information and references to employees about how to support residents by connecting the rules with values.*

Assessing Impact.

After narrowing our ideas down to the three potential design solutions, we conducted an impact assessment that evaluated our ideas based on feasibility and effectiveness. At the end of this exercise our team determined that our final design would be a values-based guidebook for residents and employees.

We determined that restructuring the TROSA schedule had low feasibility since the residents have an extremely busy work schedule. Such restructuring would require structural adjustment of the rehabbilitation program, which could entail push-back and a lot of administrative effort.

An employee intervention toolkit was deemed to be less effective since it focused on employees' intervention instead of directly impacting a residents' experience and understanding of the TROSA values. Furthermore, the design of such a toolkit calls for professional knowledge in areas like psychology and behavioral science, which reduces the general feasibility for our team and TROSA leadership to implement.

A values-based guidebook for residents and employees is both feasible and effective. It is feasible because there is an existing residents' manual which is distributed to all residents entering the program. This new guidebook could also be given to residents entering the program and can serve as a starting point to incorporate the changes necessary to transform TROSA from a rules-based organization to a values-based organization. We also believe that a values-based guidebook is effective because it targets both residents and employees. By using this tool, residents and employees will have a better understanding of the values of TROSA which will lead to less attrition.

The values-based guidebook is both <u>preventive</u> and <u>reactive</u>. Preventive in that the guidebook ensures the residents' and employees' will connect to values before losing faith in the process. Reactive in that this guidebook will help residents and employees reconnect to the values in times of despair that occur during the relearning and redeveloping phase of their recovery.

We believe that a redesigned, values-based guidebook for residents and employees is just the first step towards shifting TROSA from a rules-based organization to a values-based organization. By committing to a values-based guidebook that connects rules, obligations, and customs to values, TROSA will be better prepared to integrate values into the daily lives of residents and employees. This will build trust within the community and improve the success rate for residents.

PROTOTYPE:
Cocreating with TROSA residents + employees.

We created a skeleton mockup of the values-based guidebook which centers around different values, like connection, to show residents and employees during co-creation.

In prototyping, we brought our concept of a values-based guidebook to residents to test out its desirability and to better understand what values mean to residents and employees.

We talked to several residents through short intercept interviews and asked for their opinions on a redesigned guidebook and their understanding of TROSA's values. Employees' understanding of TROSA's values was also evaluated. Our findings from our prototyping and co-creation process are located to the right.

1. *Residents do not like the original manual, which they don't utilize after they finish internship;*

2. A *redesigned values-based guidebook is desirable;*

3. *Among several values we measured, residents value connection the most;*

4. *Employees and the TROSA leadership team are unable to consistently communicate TROSA's values. Identifying and agreeing on consistent values of TROSA is therefore a crucial prerequisite for the values-based guidebook.*

Based on this feedback, we adjusted our design solution, focusing on a guidebook that communicates <u>consistent</u> TROSA values. We believe TROSA should start with the value of connection, as this value came up most frequently during conversations with employees and residents. Given the inconsistent communication around TROSA's core values, we also anticipate that an important part of implementation will involve TROSA identifying and agreeing on consistent values before fleshing out content. In order to make this process of value identification easier, we have included additional insights we found through prototyping and co-creation in our appendices.

REFINE +
Select a design solution.

In our refinement phase we conducted additional interviews with residents and employees. This allowed us to further develop our design solution by considering the influence of different residents (men, women, residents coming from prison, etc) within TROSA and prioritizing types of content to be included in the guidebook. To illustrate the validity of our fleshed-out design solution, we established a proof of concept by examining the impact of this guidebook on both the resident and employee experiences before and after the introduction of the guidebook.

We made a concerted effort to speak and collaborate with residents and employees from both the men's and women's programs to better understand the differences and similarities between the two programs. This helped to guide our design and tailor the guidebook to meet the needs of various residents. We also focused on seeking opinions from residents and employees on what contents should be included in the guidebook.

Through this process we found that there are important differences among residents that we must recognize; different people will connect to TROSA's values in different ways. We also affirmed that TROSA needs to change from a rules-based organization to a values-based one. Lastly, we recognized that we should include staff stories that embody the values, and note key rules that are connected to certain TROSA values in the guidebook. This feedback helped us to solidify and create a more detailed mockup of the values-based guidebook *(pictured to the left).*
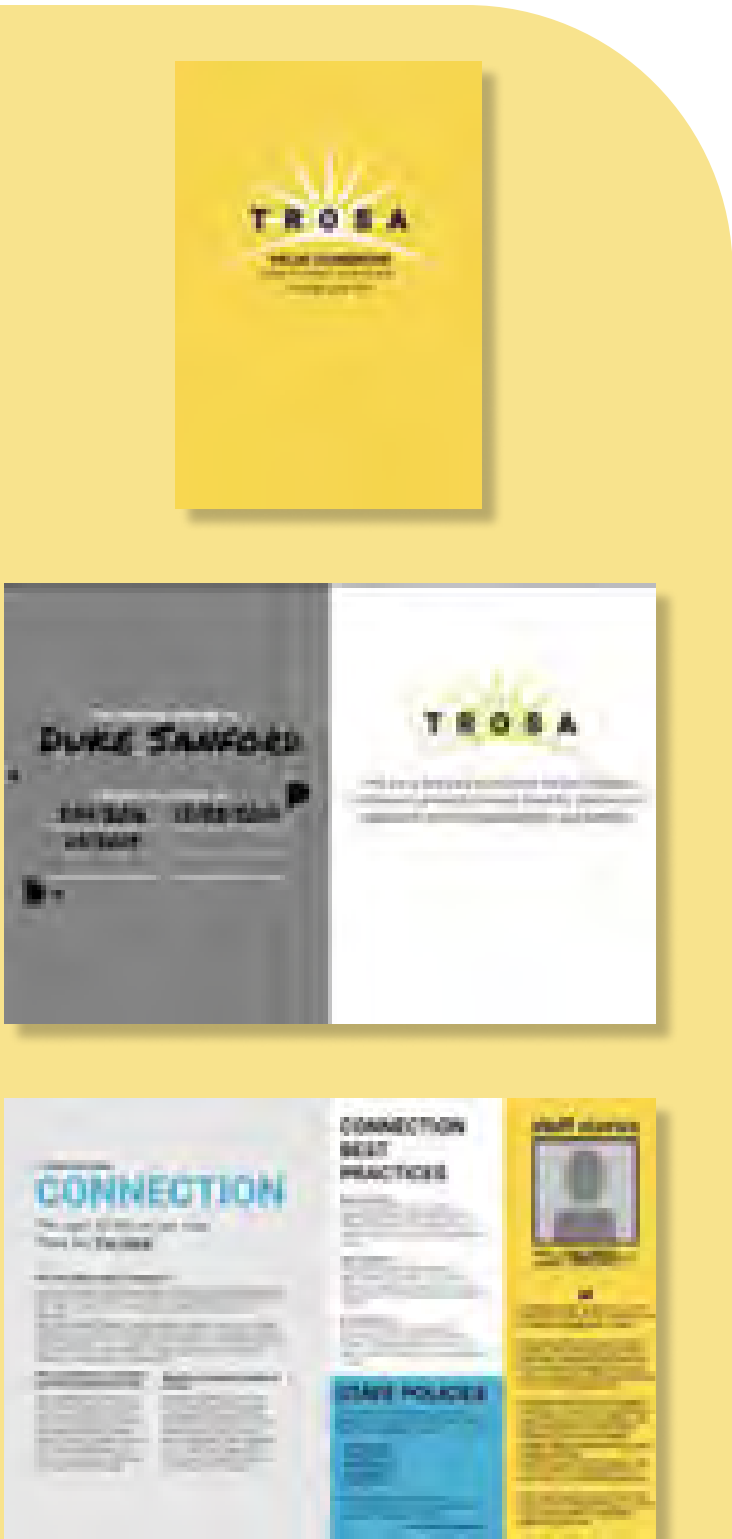
Proof of Concept.

During interviews that we conducted in our prototyping and refinement process, we heard a lot of stories and insights that reaffirmed our initial insights from the discover phase:

1. Residents with a strong connection to and understanding of values can better navigate recovery.

2. The most successful interactions occur when employees support residents through values-based conversations.

We were therefore able to conclude that our final design solution, a values-based guidebook for residents and employees, would be able to meet our needs statement and connect residents and employees to the values of TROSA. This will build trust within the community and improve the success rate for residents.

This proof of concept is further illustrated in our imagination of the impact listed below. This values-based guidebook would:

Move residents away from feeling *confused, frustrated* and *disconnected* during their recovery to feeling *aware, uplifted* and *connected* to the TROSA community; and,

Move staff away from supporting residents in an arbitrary, improvised, and rules-based way to supporting residents in a *consistent, deliberate* and *values-based* way.

Imagining the Impact: From–To Experience for Residents + Employees

Residents		Employees	
FROM	**TO**	**FROM**	**TO**
TROSA residents' experience is based on rules.	TROSA residents' experience is based on values.	TROSA employees only know the names of residents that they interact with on a daily basis.	TROSA employees know every resident and can have authentic interactions with each of them.
TROSA residents feel frustrated by the rules and don't understand how they'll help during their recovery.	TROSA residents have clarity around the rules and consequences and connect them to values. They understand how rules will help them during recovery.	Residents only trust and look up to a small group of TROSA employees.	Residents trust and look up to all TROSA employees.
TROSA residents receive mixed messages about rules and expectations, which lead to confusion and mistrust in staff.	TROSA residents have a universal understanding of the rules and expectations; TROSA residents trust the staff to help them in times of despair.	When residents break a rule, employees intervene by giving inconsistent consequences.	When residents break a rule, employees intervene by giving consistent consequences that are tied to values.
TROSA residents have siloed, intrapersonal recovery experiences.	TROSA residents have more communal, interpersonal recovery experiences.	Some employees cannot identify and/or explain what TROSA values are.	All employees can identify and explain the TROSA values.
TROSA residents feel isolated in times of despair and doubt.	TROSA residents feel supported by and connected to the TROSA community.		

Key Takeaways
from the Design Phase.

In our design journey, we came to a conclusion of redesigning the original resident manual into a values-based guidebook. This will address the residents' need to understand and connect to the TROSA values and way of life, and will address employees' need to understand, communicate, and embody the TROSA values and way of life. Here are the key takeaways going on into our implementation stage:

1. A values-based guidebook will be our final design solution;

2. This guidebook will connect residents and employees to TROSA values and way of life, which will serve to be a preventative and reactive tool

3. This guidebook focuses on the relearning and redeveloping stage of residents' experience;

4. TROSA needs to solidify and agree on consistent values as a prerequisite for such a values-based guidebook;

5. Connection is an important value at TROSA.

WE CREATED A TOOL, HOW DO WE

DELIVER + MEASURE

IT?

OVERVIEW:

The deliver stage requires the team to present their findings and design solution to the organization's leadership.

This presentation ideally includes a mock-up of the design solution, a roadmap for how to implement the design within the organization, and instructions on how to measure the success of the design. The HCD process does not end with the team delivering the design solution. The human-centered thinking embedded in the design solution should serve as a starting point for the organization to become more aware of the human experiences of both customers and employees. By implementing the design and measuring progress through developed metrics, the organization is tasked with iterating and improving the design solution based on human experiences, which would eventually lead to an improved human-centered organization.

IMPLEMENT.
Integrating Solutions into Offerings.

MEASURE.
Tracking for Continuous Improvement.

ITERATE.
Incorporating Feedback.
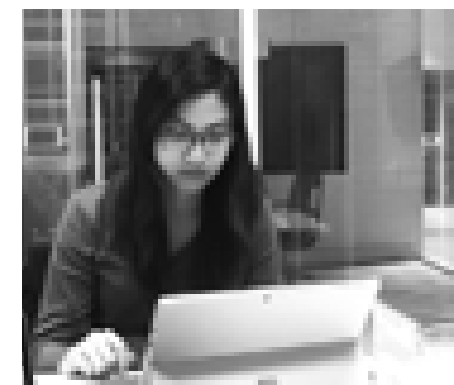
By this time in our journey, we created a roadmap for TROSA to implement the values-based guidebook.

To get started we asked ourselves,

What is the purpose of our Implementation Plan?

That is when we remembered a key takeaway from one of our in-class workshops. The purpose of the plan is:

> [To] *map out a timeline with key milestones and activities.*

This step in the human-centered design journey allowed us to strategize how we could get TROSA to adopt our design solution in an appropriate manner and period of time. We broke down the process to create a value-based guidebook and created a 180-day implementation plan for TROSA. This plan contains five steps that we will explain in further detail in the sections to the right.

We also learned that developing and executing pilot plans are an integral part to the delivery and measure phase. For our specific challenge, we decided that including our pilot plan as one aspect of at the end of our larger implementation plan made the most sense. After talking about our implementation plan, we will discuss our proposed pilot plan for TROSA.

Step 1
Prepare.

TROSA will receive our proposal and jumpstart the development and implementation of a values-based guidebook by setting up efficient teams and fostering buy-in within the community. Our final presentation to the TROSA leadership and this storybook marks the first day of the preparation stage. Key milestones for TROSA from Day 0 to Day 30 include:

1. Foster buy-in of a values-based guidebook within leaders and staff members;
2. Build a task force of TROSA residents, employees, graduates, and other stakeholders to lead the creation of a value-based guidebook;
3. Most importantly, establish a timeline for Step 2.

Step 2
Identify.

TROSA will identify a set of 2-5 values through the organization that serve as the basis for our values-based guidebook. This process calls for inputs from both residents and staff, from which the implementation team will synthesize and conclude with consistent values across the organization. Key milestones for TROSA from Day 30 to Day 90 include:

1. A meeting amongst TROSA's leadership team, where individuals share what they believe TROSA's values are and why. This will help the leadership team develop a working understanding of their organization's values before engaging with their constituents;
2. Interview TROSA residents and employees to find what values in the exist within the TROSA community;
3. Conduct forums with additional stakeholders (graduates, business partners, etc.,) and obtain their opinions about TROSA values;
4. Discuss and synthesize important findings and establish 2 to 5 concrete values for the organization.

Step 3
Focus.

TROSA will solidify the contents of the guidebook. This is also an interactive process with participations from staff and residents. The implementation team should flesh out sections in the guidebook based on consistent values so that they can facilitate effective communications of values that help residents and staff better connect to TROSA values. Key milestones for TROSA from Day 90 to Day 120 include:

1. Identify other important takeaways that helped determine the 2-5 concrete values for the organization and how they impact the implementation of the guidebook;
2. Create mock-ups for the guidebook;
3. Obtain feedback on the mock-up guidebooks from residents and employees;
4. Agree on the content that should be put on each page guidebook.

Step 4
Develop.

TROSA will develop a trial guidebook to be distributed among the residents based on insights from the focus stage. Key milestones for TROSA from Day 120 to Day 150 include:

1. Document, organize and finalize the components of the guidebook;
2. Render consistent terminology for the guidebook, emphasizing the 2 to 5 values the organization seeks to embody;
3. Send to files to the publisher and print the guidebook.
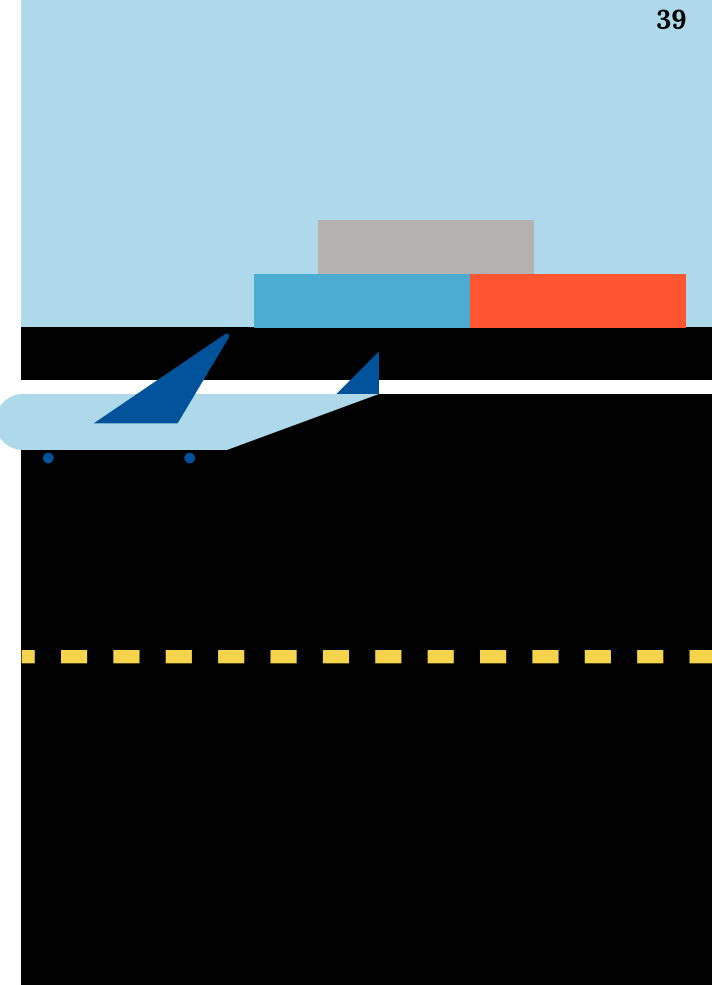
Step 5
Execute.

TROSA will implement a pilot plan discussed in detail in the next section. Key milestones for TROSA from Day 150 onwards include:

1. Implement the pilot plan;
2. Measure and evaluate the impact of the guidebook on improving the resident's experience;
3. Identify potential risks and opportunities for improvement;
4. Refine the design solution and iterate to improve the guidebook.

PILOT PLAN.

Starting with one, reaching many
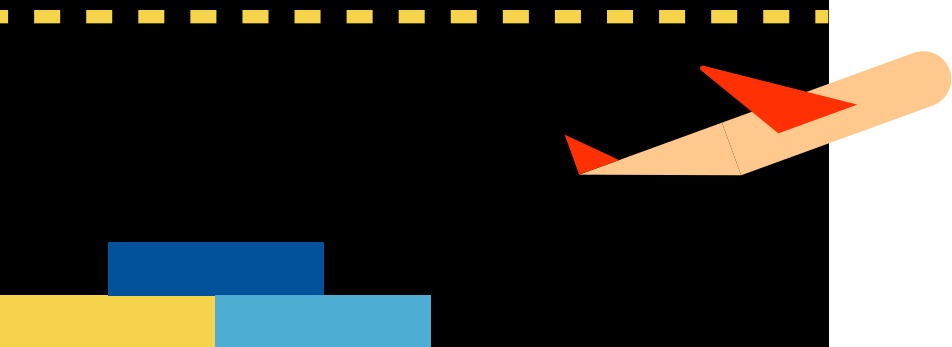
The goal of the pilot plan is to determine whether a values-based guidebook is a desirable, feasible, viable, and effective for tool for TROSA.

Desirability, feasibility, and viability lay the foundation for all design thinking. Innovation occurs at the intersection of these three attributes. In our team's HCD journey, we have found that our proposed values-based guidebook is desirable, feasible, and viable.

Based on our interviews with TROSA residents during the past 14 weeks, we find that a values-based guidebook is desirable. In fact, many residents expressed support for this tool, hence why we are proposing it. Residents expressed that they do not like the current rules manual and that they stop using it after their internship.

A values-based guidebook is also feasible to implement in the foreseeable future. We have provided an implementation plan that TROSA leadership can follow to make this process easy. Additionally, TROSA residents already receive a manual upon entry into the program, so substituting this values-based manual for the current manual will be simple.

Creating this values-based guidebook will improve the resident experience by making clear the purpose of the rules, procedures, consequences and community. We believe that helping residents and employees to understand the "why" behind the TROSA way will lead to happier and more successful residents, lower rates of attrition, higher rates of graduation, and continued sobriety after exiting the program. Introducing the guidebook in a pilot plan, to a small sample of residents, is an easy way for TROSA to determine whether the guidebook is effective and if the rest of the community would benefit from this tool.

During the Pilot

measures of desirability, feasibility and effectiveness could be assessed by asking the questions provided below.

Are residents using the tool? How are they using it?

Does the tool help residents understand the values of TROSA? How and why?

Does understanding the values of TROSA reduce pain points? How and why?

Does the tool help the residents develop faith in the TROSA process? How and why?

Does the tool increase the residents' trust in staff? How and why?

These questions and their responses will shed light on each aspect of the pilot plan's goal, enabling the leaders at TROSA to make an informed decision about the implementation of the guidebook throughout the TROSA community.

In order to test

these measures, TROSA leaders should make sure that the Pilot Plan:

distributes the new guidebook to at least 30 male and female residents that arrive at TROSA within the same admittance period;

is conducted over a 3 month period (minimum);

includes quantitative and qualitative evaluations, not limited to surveys, focus groups and individual interviews to measure the tool's impact.

Note: Any surveys that are conducted must be distributed amongst those residents with the new values guidebook and residents who own the rules manual but arrived at TROSA just outside of pilot treatment assignment.

Desirable
Do residents want this?

INNOVATION

Feasible
Can we do this?

Viable
Should we do this?
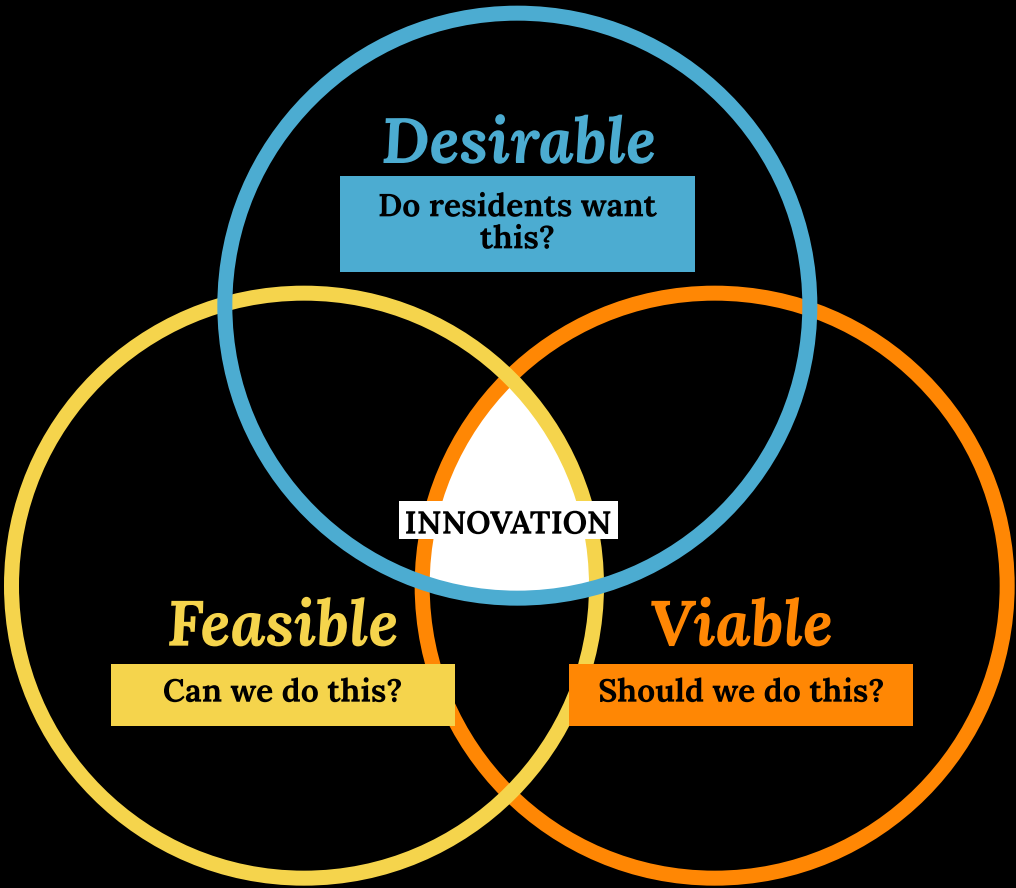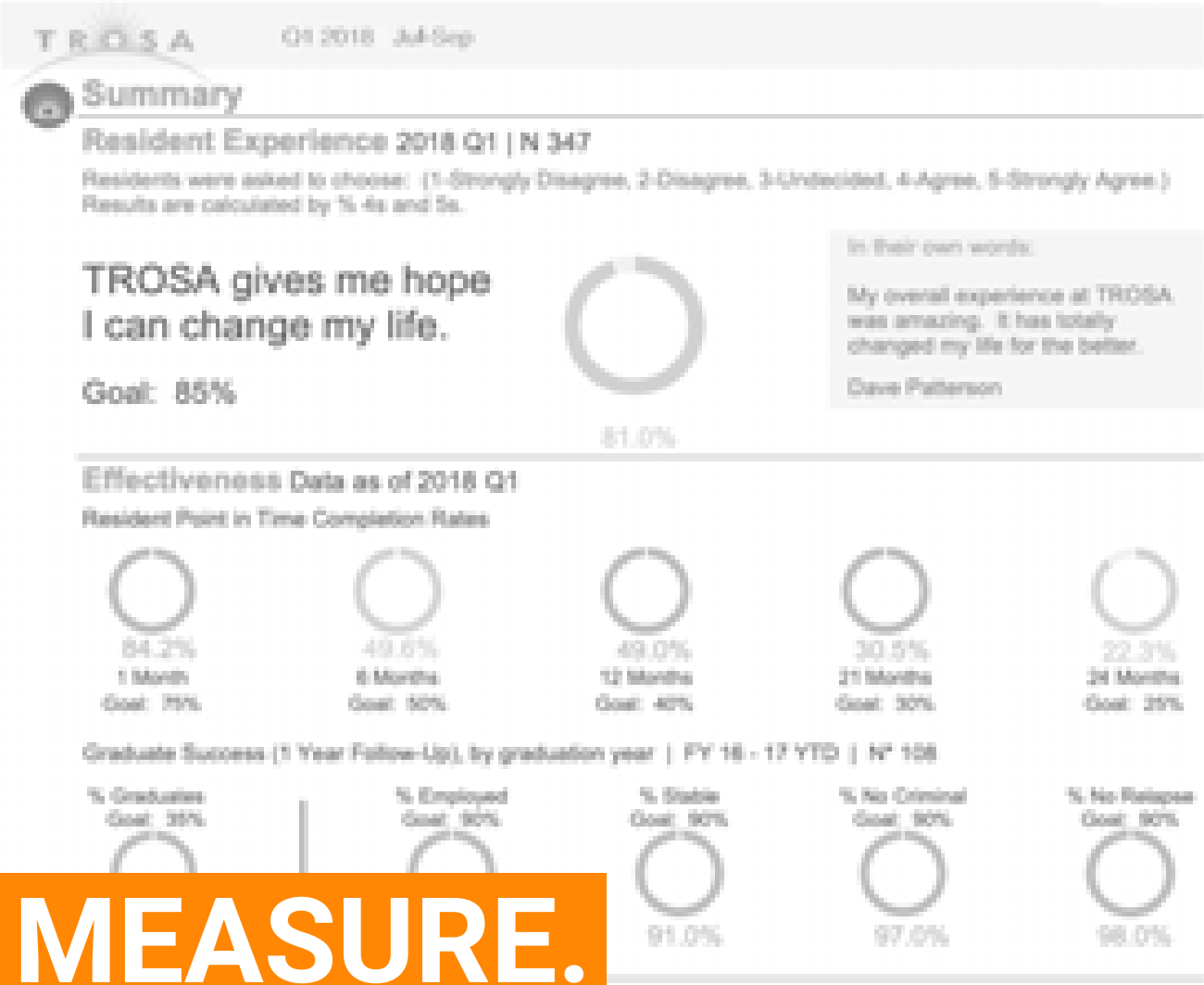
MEASURE.

Our professor Tom Allin has already created a measurement dashboard for TROSA. After analyzing the dashboard, our team wanted to keep the measurement of effectiveness (including the program completion rate and the graduate success after one year). We also decided to keep the key statement in the dashboard, which is "TROSA gives me hope I can change my life."

However, we will change the measurement questions to better target how the guidebook is impacting the residents' experience. Additionally, we will add questions to gauge how the guidebook is impacting the employees' experience. When we designed these questions, we wanted to focus on measuring the moments that matter and whether the guidebook changes them from pain points to bright spots.

Redesigned Questions for Residents

Principle of design:
How do we know that residents feel more <u>aware</u> (*moment 1*), <u>uplifted</u> (*moment 2*) and <u>connected</u> (*moment 3*) after being introduced to the TROSA values manual?

1. TROSA staff members explain values, rules, and procedures in a consistent way (*moment 1*).

2. When I break a rule, I understand why I am receiving a consequence and how it will help with my recovery (*moment 2*).

3. My positive behavior is recognized and celebrated at TROSA (*moment 2*).

4. I know who to turn to at TROSA when I need help (*moment 3*).

5. I know when I should seek help at TROSA (*moment 3*).

6. I feel comfortable seeking help at TROSA (*moment 3*).

7. When I'm struggling a TROSA staff member addresses my problems in a timely manner (*moment 3*).

Redesigned Questions for Employees

Principle of design:
How do we know that employees <u>understand</u>, <u>communicate</u> and <u>embody</u> the TROSA values to intervene in a consistent and effective way?

1. I can identify and explain TROSA's values in the same way that my colleagues do.

2. I can identify when a resident needs help and address this in a timely manner.

3. I can connect a rule/consequence to a value when I speak to residents.

4. I recognize and celebrate resident's positive behavior frequently.

ITERATE.

The human-centered design process includes iteration to continuously improve the solution according to feedback from customers and employees. TROSA will collect data on the effectiveness of the guidebook during the pilot phase, which will help to inform future iterations. After they collect feedback, TROSA leadership should come back together to discuss what parts of the guidebook are working and what parts are not, and use this information to design a second iteration.

Final Considerations

Although we created a practical implementation and pilot plan, there are still some critical uncertainties that may influence the success of the values-based guidebook.

1. *TROSA residents and staff must commit to using this guidebook for it to be effective in shifting TROSA from a rules-based organization to a values-based organization;*

2. *Costs associated with printing and delivering the manual may discourage TROSA from implementing the plan;*

3. *Changing to a values-based organization is a long-term process and this is only the first step in the right direction. It is likely that the values-based guidebook will not lead to an immediate, large drop in attrition. TROSA will need to have a long-term commitment and plan to facilitate this cultural change;*

4. *Even though we are promoting consistency, we also recognize that there are different types of residents within TROSA that will likely respond differently to this manual. This will be discussed in detail in our appendices.*

APPENDIX

In the appendices, we aim to document our discoveries at TROSA that have not been incorporated into our design and presentations. Hopefully, these insights will help TROSA leadership to develop a deeper understanding of their organization.

Values

We'd like to highlight three important values we've identified and deemed as crucial for TROSA: accountability, community, and courage. These values are drawn from our conversations with residents and employees and they can serve as the starting point for TROSA's deep-dive into discovering the 3-5 most important values of the organization.

1. Accountability: every member in the community should be accountable for himself/herself and for others in the community. They should be willing to take responsibilities for the community and take consequences of their action.

2. Community: TROSA is a therapeutic community that helps residents with their life long recovery. Recovery at TROSA is a communal experience, where the residents will connect to the community, and support one another's recovery.

3. Courage: residents should have the courage to surrender to the TROSA way, change their lifestyles, and seek help when they are in need. Being able to show the vulnerability is a form of courage.

Personas

There are different types of residents at TROSA. We refer to these different types as personas. Explaining what we've learned about different personas is crucial because the guidebook may have different impacts on different personas.

1. Men and women:

The women's program is much smaller than the men's program, which means that the female residents get more attention and care from the staff members. Also, the women we spoke with were usually more willing to show and share vulnerability. So, when women residents are struggling, they are more likely to seek others' help.

Compared to women's program, men's program is much bigger so it is more difficult for the staff members to know every resident's name, characteristics, and stories. Also, the men we spoke with were less likely to be open to show their vulnerability. This meant men were less willing to ask for help when they needed it.

2. Prison mentality:

Some residents come to TROSA from prison. At TROSA, telling on others (passing information) is a way to be accountable. However, many residents explained that in prison, telling on others would cause them to get hurt. Moving away from the prison mentality toward the TROSA mentality may cause uncomfortability. Therefore, the prison mentality may impede some residents from buying-in to the TROSA values.

3. Self-motivated:

a. Some residents have moments of clarity before they come to TROSA. These residents tend to be very self-motivated and proactive to make changes. They more easily understand the "why" behind following the rules and can easily tie them to the TROSA values. These residents will likely adapt to a values-based culture most easily.
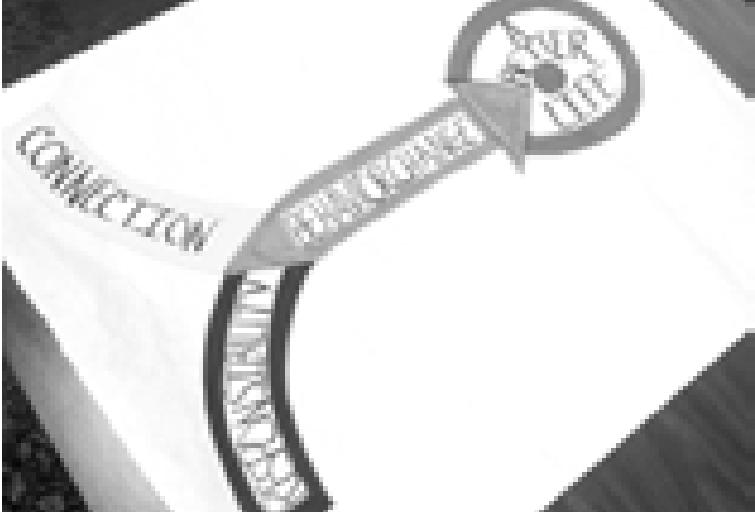
Hierarchy

TROSA has developed a hierarchy in order to manage a large community effectively. In this hierarchy, a resident may interact with his/her peer brothers or sisters that are in leadership positions more frequently than they interact with formal staff. Residents who assume leadership roles represent the interaction channels between staff and residents. They deliver key messages to other residents and also receive instructions from formal staff. Currently at TROSA there is a lot of inconsistent communication amongst the hierarchy. Formal staff members relay inconsistent instructions to residents in leadership roles. This causes these residents in leadership roles to relay inconsistent instructions to other residents in the program. This inconsistency adds to the growing distrust between residents and employees at TROSA.

To correct this inconsistency, when we introduce the value-based guidebook, it is wise to start with helping the staff members to be consistent in the way they discuss the TROSA way. More importantly, the team leaders, head leaders and the senior residents, who all play important roles in the hierarchy, also need to be consistent in the language they use, which will help build trust between the entire TROSA community. For this reason, we recommend that TROSA distributes the values-based guidebook to all residents and all employees.

Other solutions we developed:

Two other solutions that came up in our ideation process are further elaborated here. We believe these designs can inspire TROSA for future improvements to the organization.

1. Staff intervention toolkits

An intervention toolkit would make it is easier for staff members to identify residents that are struggling and intervene appropriately and accordingly.

Reasons for not choosing it include:

Designing an intervention toolkit requires professional knowledge of psychology, which our team members do not possess. However, it is probable that TROSA could design its own intervention toolkits with the help of their experts and counselors. The goal of HCD is to improve the customer experience. This toolkit seems to focus too much on the employee side.

2. Changing the schedule of staff member's office hours

This solution aims to change the schedule of staff members' office hours, to make the interaction and communication between residents and staff easier and more frequent.

Reasons for not choosing it include:

The staff may be too busy to reschedule the office hours. Even if we were to change the office hours, it is hard to ascertain the increase in communication frequency.