

Summary

Background

REEF has grown quickly and exponentially over the last year, with teams focused vigorously on developing solutions and using whatever resources at the ready. That included defining Personas to articulate perceived user needs so that REEF can deliver products with speed to market. This required each team to use our start-up mentality and take singular approaches to defining those Personas.

Challenge

To design successful products, we must know who our users are. However, despite many personas across the REEF ecosystem, we don't have usable, complete personas to adequately inform research and design.

Current state shows fractured philosophies and approaches toward persona design

36 "personas" (so far) with various level of detail and documented research

Redundant and unnecessary information that creates noise

Inconsistent adoption of Aha! as REEF's Persona repository

Solution

Create MVP personas for primary users using existing work

Define and adopt a repeatable framework for Persona development

Align on common elements (and template format)

Reconcile inventory and map in matrix to new elements

Institute governance to persona planning, design and maintenance

Current State

Information Gaps



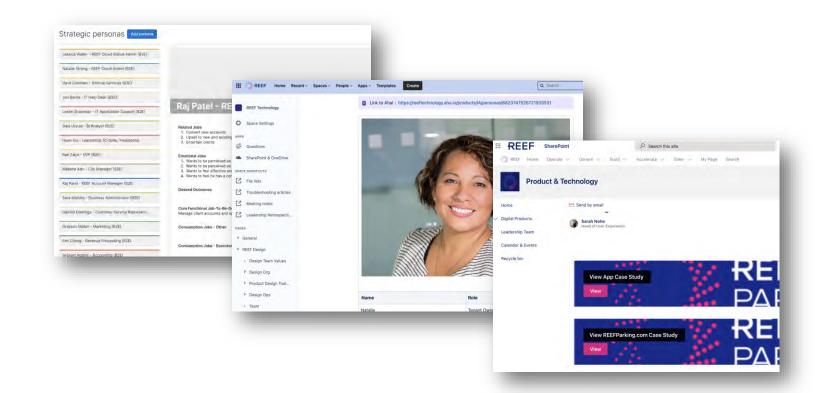
Often based on hypothesis not substantiated by user research or external data

Attributes often focus on REEF capability vs user need

No clear understanding of date or source of information to confirm currency or validity

As well as redundancies within individual personas

No Single Source of Truth



36+ personas exist but are not easily findable

Even though Aha! is where personas should live, they are also stored in Confluence, Sharepoint, etc.

Various level of detail captured for different personas in same project

Inconsistent Approach



Research: How information and artifacts are gathered

Content: Templates, nomenclature used, attributes captured

Documentation: Author/owner ID, data sources, and Persona DOBs



Despite having 36 personas, we don't have a clear picture of our two primary users:









To overcome these barriers, work is underway to organize legacy Personas, establish an MVP template, and define our primary users

Building a new enterprise model.

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Proposed Common Elements and Template

Refined the number and terminology (being used in Aha! and elsewhere) for persona categories Put definition to each and fleshed out redundancies and distilled into more streamlined

Image

Profile

Ex. age, demographic data, Interests/Psychographic Info. Who is this person? Ex. Familiarity with and use of tech; interests; favorite brands; etc.

Characteristics

3-5 key personality attributes; Ex. Organized, Practical, Hard Worker

Persona/Name

The person we are designing for

Business Unit

Parking
Real Estate/REEF Cloud
Kitchens
Retail
Healthcare

Proximity

Business Segment

B2E, B2B, B2C Formerly "user type."

Job Title

Role

Needs & Wants

What are the things that this person needs to complete their jobs to be done? Functional needs. "I want... /I need..."

Pain Points

What are the things that prevent them from fulfilling their tasks? What causes frustration and friction? What are the things that you don't want to think about? I don't have time for...

About

Short descriptor snapshot of who this person is (or aspirational one-line quote)

Jobs-to-be-Done

These are tasks done on a regular basis related to vertical area. Items identified as "goals" in current matrix can be redundant to this. Current matrix only includes tasks to be done with REEF; suggest this is taken up a level. Ex. "Run kitchen efficiently," not "Use KDS"

How I Use REEF Products

Execute (Perform, Transact, Administer)

Executional tasks performed via REEF + products used

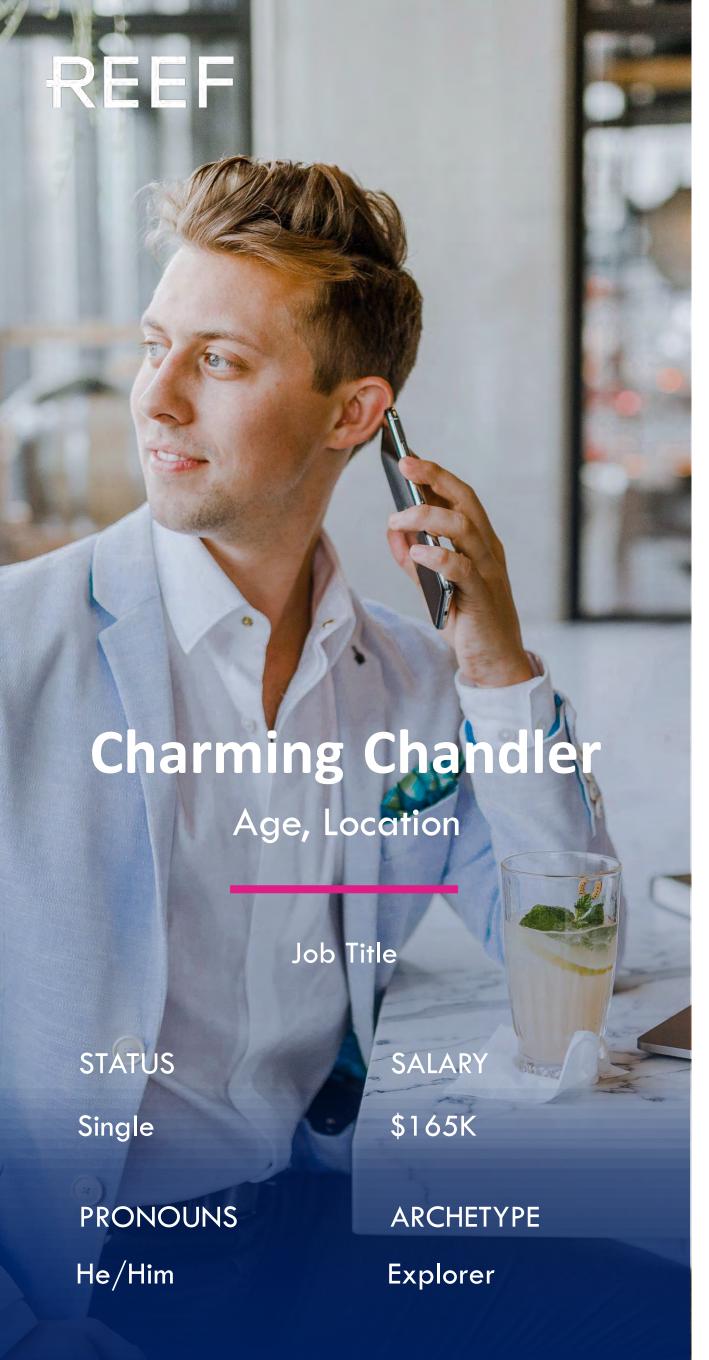
Monitor (Verify, Track, Check)

Monitoring tasks performed via REEF + products used

Similar Roles

Roles that share many of the above attributes. Nuances can be identified here if necessary.





PERSONALITY

- Hustler
- Charismatic
- Charming
- Friendly
- Loyal

BIO

Jacob is a salesperson with a knack for establishing key partnerships with other businesses. While he resides in Los Angeles, his true home is in hotels, Airbnbs, and in car rentals.

He loves collecting points on his Amex and expenses everything since it's all related to his sales.

BUSINESS SEGMENTS

- Parking
- REEF Cloud

BUSINESS UNIT(S)





SIMILAR ROLES

Account Manager, Real Estate Broker, Sales Manager

DEVICES







MOST USED APPS





"I travel all over the U.S. to have face-to-face business meetings to build rapport with my clients."

JOBS-TO-BE-DONE

- Manage a portfolio of \$10 million generated for his company
- Conduct analysis on needs for client
- Understand market conditions related to his client
- Don't get tickets

WANTS & NEEDS

I need an easy way to itemize my receipts to get reimbursed and collect points on my card.

I want a way to park quickly and easily so I can focus on my meetings rather than my parking.

PAIN POINTS

- Complexity confuses him
- Needs reminders about the time because his meetings often run late
- Easy, convenient parking is a necessity to get to his meetings

Stakeholder Questions

Adopting a common approach to discovery will help us further refine Legacy Personas for new template and inform design of the new model

Do you have developed user personas for X area?

How have you been guiding the direction of this product area w/o personas?

Do you have an understanding of the types of users, currently using each product in this area?

What kind of product is X (B2B, B2E, B2C?)

How would you describe your understanding of the intended audience?

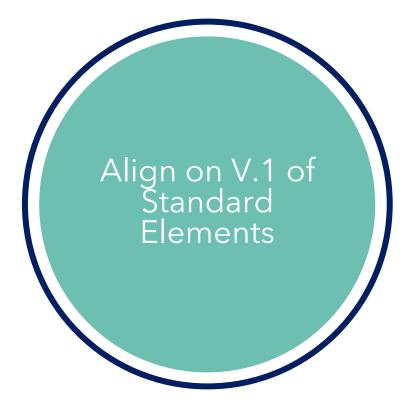
Are you aware of any specific goals or pain points within the current tool when being used by a specific role?

Do we have any user feedback on the tool?

Do we have a way to contact actual users?

What's Next

Proposed steps to fulfill our goals.



- Common categories
- Nomenclature and definitions
- Identify which elements might flex
- Refine "Property Owner" and build out "Business Owner"
- Review new primary personas with stakeholders and complete v.1
- Begin to build a panel



- Pressure test existing personas by putting into refined matrix and template
- Apply to matrix and templates
- Fill gaps or start fresh
- Pressure test elements and nuances

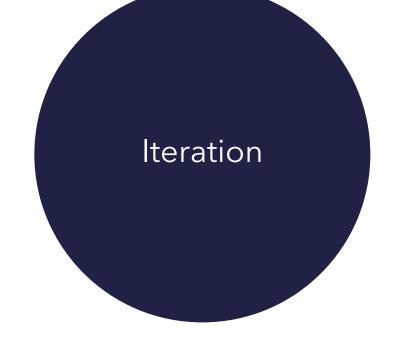


- Get a defined set of priorities and verticals from the business
- Research may include:
 - Stakeholder interviews
 - Demographic and psychographic research
 - User testing





- Standards: Templates, elements, foundational interview questions
- Governance: ownership, indexing and maintenance



- Continuously iterate personas with new information
- Quant: Data from tech stack
- Qual: Insights from research





APPENDIX

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Proposed Common Elements for Personas

Category	Definition of Category		
Persona (Name)	The "person" we are designing for		
Profile	age, demographic data, interests/psychographic Info		
Characteristics	3-5 key personality attributes; Ex. Organized, Practical, Hard Worker		
About (or Aspiration)	Short descriptor snapshot of who this person is (or aspirational one-line quote)		
Business Unit	Parking Real Estate/REEF Cloud Kitchens	Retail Healthcare Proximity	
Business Segment	B2E, B2B, B2C Formerly "user type." Category label changed for better context. How do we differentiate B2B and B2E? B2E flips between internal and external employee.		
Job Title	Title and professional role		
Jobs-to-be-Done	These are tasks done on a regular basis related to vertical area. Items identified as "goals" in current matrix can be redundant to this. Current matrix only includes tasks to be done with REEF; suggest this is taken up a level. "Run kitchen efficiently," not "Use KDS"		
Execute (Perform, Transact, Administer)	Executional tasks performed via REEF		
Monitor (Verify, Track, Check)	Monitoring tasks performed via REEF		
Products	Products used to perform Execute and Monitor		
Needs & Wants	What are the things that this person needs to complete their jobs to be done? Functional needs. " I want /I need		
Pain Points	What are the things that prevent them from fulfilling their tasks? What causes frustration and friction? What are the things that you don't want to think about? I don't have time for		
Similar Roles	Roles that share many of the above attributes. Nuances ca	an be identified here if necessary.	

REEF Cloud

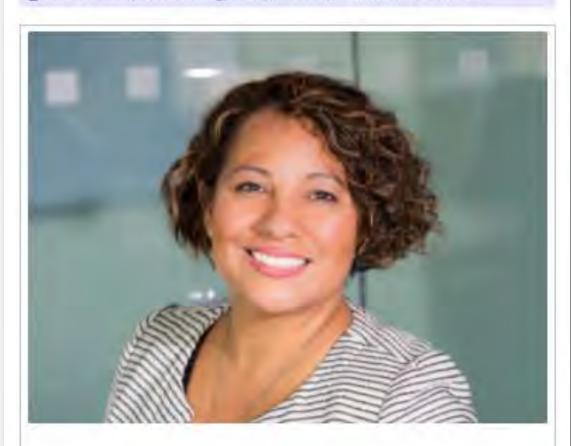
July 2020



REEF Cloud

Persona | Primary

Link to Ahal - https://reeftechnology.aha.io/products/IA/personos/6823747526721933531



Name	Role		
Natalie	Tenant Owner, B2E		
Needs for MVP	Needs for FUTURE state		
Configure the system around organizations, roles, security, permissions of users. Manage users (invite, delete, edit) Set up REEF parking.ord, create groups within management organization (ex. UK, USA, etc.)	Invite Partners Once a deal is closed with a partner (ex. Wendys) she would sent initial invite to their admin. Onboarding Provide support for configuring the system, to ensure things run smoothly. Customer Support provide ongoing support		
Goals	Pain Points		
System admin in a high level Reduce Cost Add Value	Complexity		

Tasks

1. User Management

a. Grants viewers permissions to the necessary reporting and Bi modules.

b. Grants access to all REEF Cloud data for the one location

2. Set up the system.

- Browse active directory by
- Role-bases Teams and/or Groups

Individu

3. Set up the house" Invite people & assign Permissions

4. From Als

a. LOCATE (Gather, Access, Retrieve)

- b. PREPARÉ (Setup, Organize, Examine)
- c CONFIRM (Validate, Prioritize, Decide)
- d. EXECUTE (Perform, Transact, Administer)
- e. CONCLUDE (Store, Finish, Close)
- f. MODIFY (Update, Adjust, Maintain)
- g. MONITOR (Verify, Track, Check)

Persona | Secondary

☐ Link to Aha! @Sarah Nohe



Name	Role	
Leonard	Owner / Global Admin	
Needs MVP	Needs FUTURE	
View the modules they have access to on their dashboard		
View modules related to global, national, regional, and local.		
 Organized and nested in a way that it cloes not feel like there are just a bunch of views and actions everywhere 		
Goals	Pain Points	
Tasks		

1. Manage tenant's future

 Post MVP tenants that are REEF-like; tenants like a real estate company or someone who needs software to help them leverage Real Estate).

Persona | Tertiary

■ Link to Aha!: @Sarah Nohe



Name	Role	
Matt Charter (Raj's Boss)	Regional Manager, B2E	
Needs MVP	Needs FUTURE	
Only see one location.		
Goals	Pain Points	

1. Regional EVP: Needs access to the region information in REEF Cloud to enable decision making.

Persona | 4th

Link to Ahal : Raj Persona



Name	Role	
Raj	Employee (Matt is his boss) Manages client accounts & operations	
Needs MVP	Needs FUTURE	
 Access to the application modules to execute his work. Solution: Raj is in a role that grants him the appropriate module permissions. 		
 Access to the right data to do his job, and not more. Solution: Raj is in one or more Active Directory groups at the location/service level, which give him access to only those locations/services he manages. 		
 Help clients understand how the services they're using are performing. 		
 Solution: Raj creates an organization and configures its locations and services. He chooses the modules the organization has access to Raj can then invite his client users to join the organization. 		
 Grant his organization users to access to the application modules they need to execute their work. Solution: Raj adds the organization users to new 		
or existing roles that grants them the appropriate module permissions. • Grant his organization users to access only their		
organization's data. • Solution: Raj adds the user to their organization.		

The user can then only see data for their

organization.

als Pain Points

Tasks

DEFINE

- 1. Define sales leads
- 2. Define new sale and upsale opportunities
- 3. Define and understand sales territory
- 4. Understand existing accounts and services from client lis-

LOCATE (Gather, Access, Retrieve)

- 1. Search for leads
- 2. Search for information for new sale and upsale opportunities
- 3. Seek data from competitors for comparison
- 4. Obtain results from past client surveys

PREPARE (Setup, Organize, Examine)

- 1. Evaluate leads to bring forward to manager
- 2. Perform market research
- 3. Prepare information to present to manager (draft sales deck)

CONFIRM (Validate, Prioritize, Decide)

- 1. Determine which leads are worth pursuing
- 2. Discuss leads with manager
- 3. Prioritize leads with manager
- 4. Obtain manager approval

EXECUTE (Perform, Transact, Administer)

- 1. Deliver sales pitch
- 2. Sign contract to provide new services
- 3. Resign/reactivate old contract to continue services that ended.
- 4. Setup draft client organization
- S. Setup diraft real estate
- 6. Setup draft services
- 7. Get approvals
- 8. Go live publish the service for the client

CONCLUDE (Store, Finish, Close)

- 1. After conclusion of contract, close services
- 2. Perform lessons learned why service was closed
- 3. Keep closed client contract and services available in case the client changes their mind in the future

MODIFY (Update, Adjust, Maintain)

- 1. Administer real estate (time kept to minimum to focus on clients)
- Administer services at the location
- Administer organizations.
- 4. Create competitive advantage by offering new capabilities
- Maximize revenue for clients
- a. For example, add or change services to maximize revenue

MONITOR (Verify, Track, Check)

- 1. View real-time reporting
- 2. Obtain client feedback (surveys etc...)
- 3. Measure parking capacity over time to maximize yield

Pricing Engine



Pricing Engine - Persona Maps



"I need to be able to create a rate for everything under the sun."

BUSINESS MOTIVATIONS

Setting rates accurately, significant income is at stake so there is no room for error.

Setting strategic rates for various time periods, special events and holidays.

A smooth experience for the customer so that their payment matches the expected cost. PRICING ENGINE USER PERSONA

Keith Jones

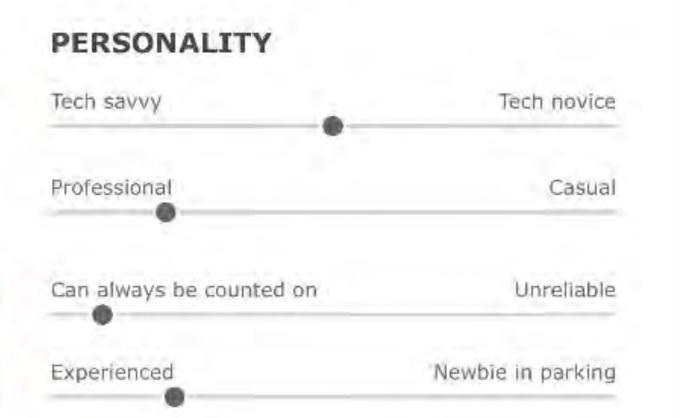
JOB TITLE: PARKING MANAGER

CAUTIOUS

BUSY

ORGANIZED

DETAIL ORIENTED



FEATURE MUST-HAVES

Price Breakdown when testing rates to clearly see what components make up a charge.

Definition of 'rate type' - titles have different meaning and function in different locations.

Ability to look at a group of rates and easily see that all days of week are covered; in a glance process days and times are set at the specified prices.

PAIN POINTS

A rate that doesn't work as expected and having to spend time trying to figure out why.

Software not built to handle a rate type so user having to "trick" the system and test to see if it works as hoped.

Parkers calling to complain or report issues. This can be caused by prices not coming through correctly or something just not making sense to users due to system limitations.

17

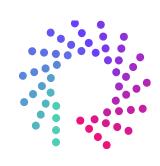


Pricing Engine (December 2020)

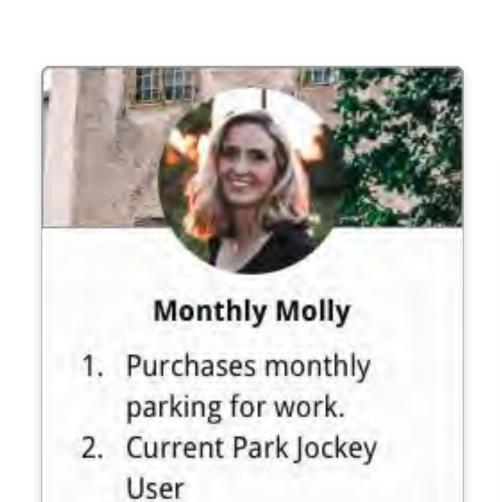
REEF Parking



User Research



In order to understand and design for and address the needs of our users we needed to gain understanding by creating personas that would inform the functionality. With the information available to us we decided to build protopersonas based on what we currently know and evolve them as our data collection and research grows after the launch of phase 1.



Needs to pay notice







3. Wants to contact the

appropriate REEF

specialist



Persona Development

We created provisional personas to validate the value proposition, and more in-depth personas to guide the UX requirements.

Provisional Personas

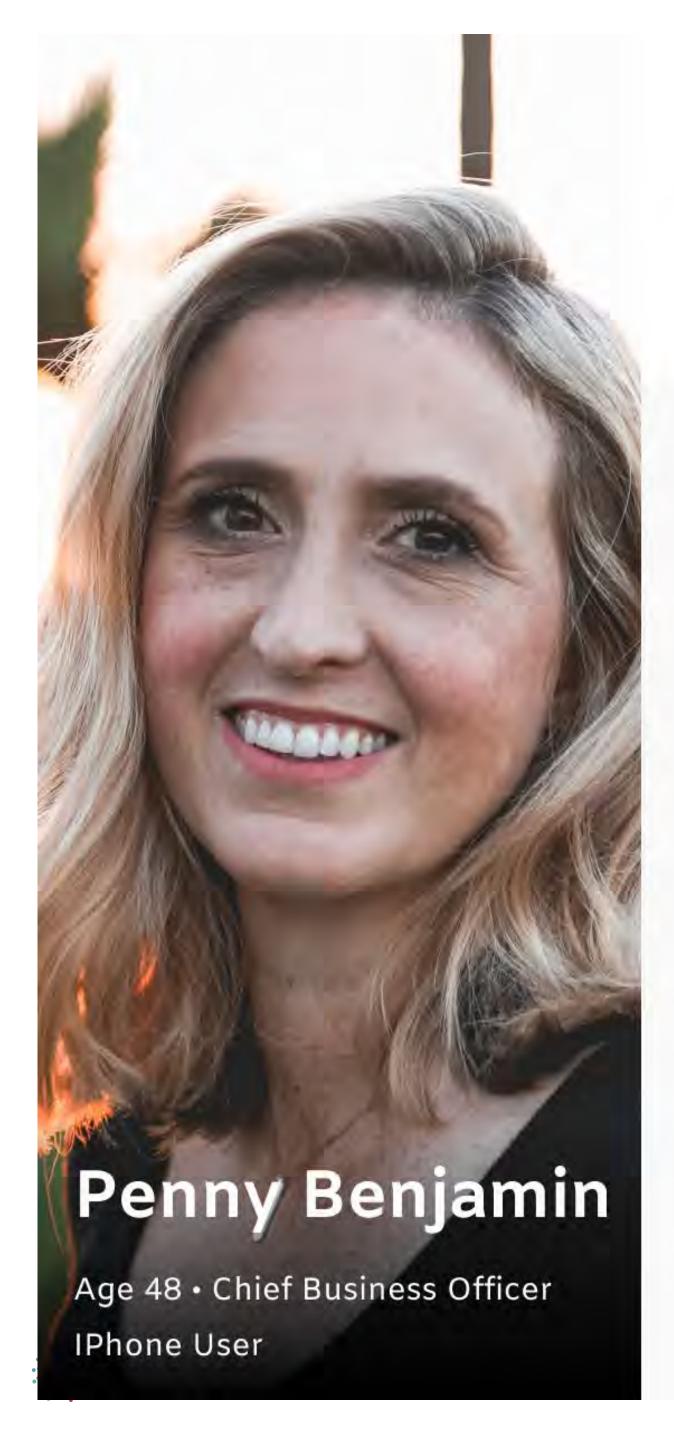
In order to begin empathizing with our users, we researched user behavior and existing mental models and proceeded to develop the quick personas based on those insights.

- Transient Parker
- Monthly Parker

3-Dimensional Personas

We identified the needs and goals of these personas in order to create them based on real characteristics and motivations, combined with the business and user goals. *****







Aspirations

I need to be able to multitask at all times, I don't have time to think about the little things!

Characteristics

- Busy working mom
- Has major business responsibilities, in addition to responsibilities at home (errands, cooking, kids, etc.)
- Feels that it's important to leave a clean impact on the environment for generations to come

Goals & Needs

- · Park conveniently
- Wants to be socially engaged / Attend to business matters
- Willing to pay extra for the convenience of close parking or valet to avoid walking in heels
- Minimize number of errands she does on the weekends so she has more time to spend with family

- Doesn't know how to use parking apps
- Feels unsafe while parking in lowlit or unfamiliar places
- Lives in suburbs and is hesitant of street parking
- · Somewhat forgetful, sometimes goes to the wrong floor in the parking garage
- Usually on calls when parking, so doesn't want to use her phone to get in or talk to an attendant





Aspirations

I want to go to concerts on my free time. I just want to live my life to the fullest, man.

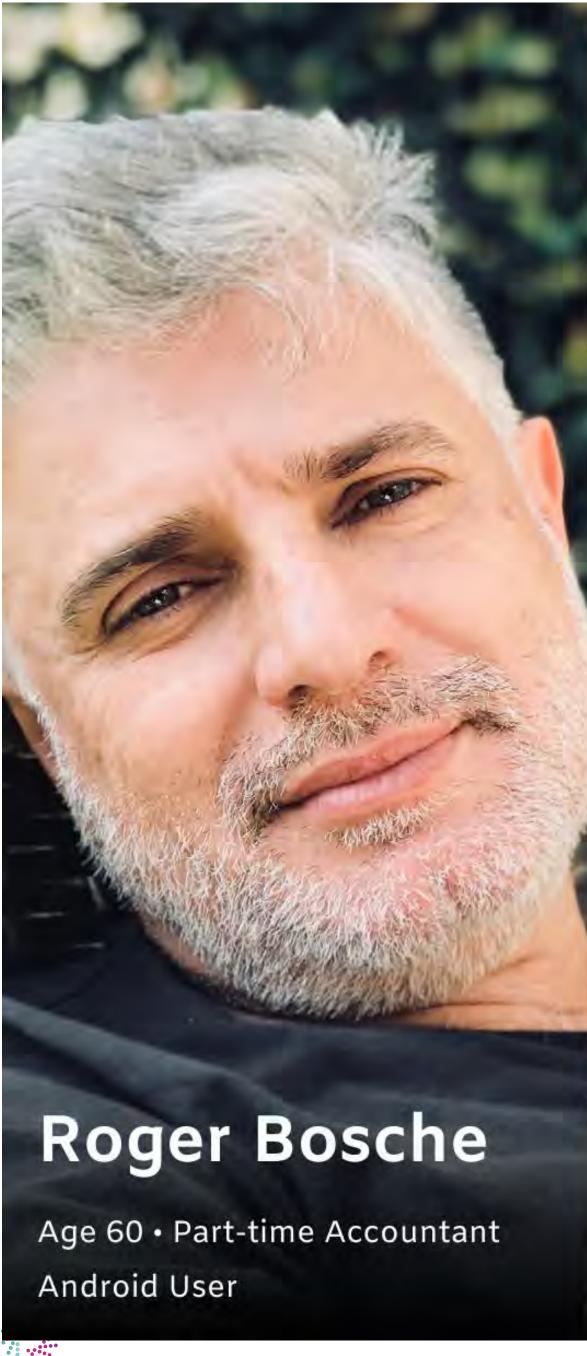
Characteristic

- Married with a baby in the city
- Travels for work regularly (out-of-state)
- · Has a motorcycle, SUV and Sedan
- · Enjoys concerts, sporting events, and dinners out regularly

Goals & Needs

- Wants to have well-planned date nights
- Needs to easily swap cars with husband
- · He wants to know where he's parking ahead of time at events, hates waiting.

- · Has to drive everywhere because no carseats available in rideshare cars
- Hard to expense airport parking
- Hard to park large SUVs



Aspirations



I always lose my validation ticket outside of my doctor's office.

Characteristic

- Single
- · Works from home
- Puts his EV car on Getaround on weekends near the airport, because he lives near the airport
- · Has recurring medical needs and is in a wheelchair
- Visits doctors every week

Goals & Needs

- · Wants to be able to park at the doctors office and other places he visits without waiting in line.
- · Likes to have parking ticket validated when at restaurants and shops.
- Needs affordable parking close to his destination

- Not comfortable using smartphone
- · Has big fingers and struggles to type in zone, prefers to scan zone or choose from existing locations
- Hard to find ADA spaces
- Hard to navigate parking garages
- Hates getting parking citations





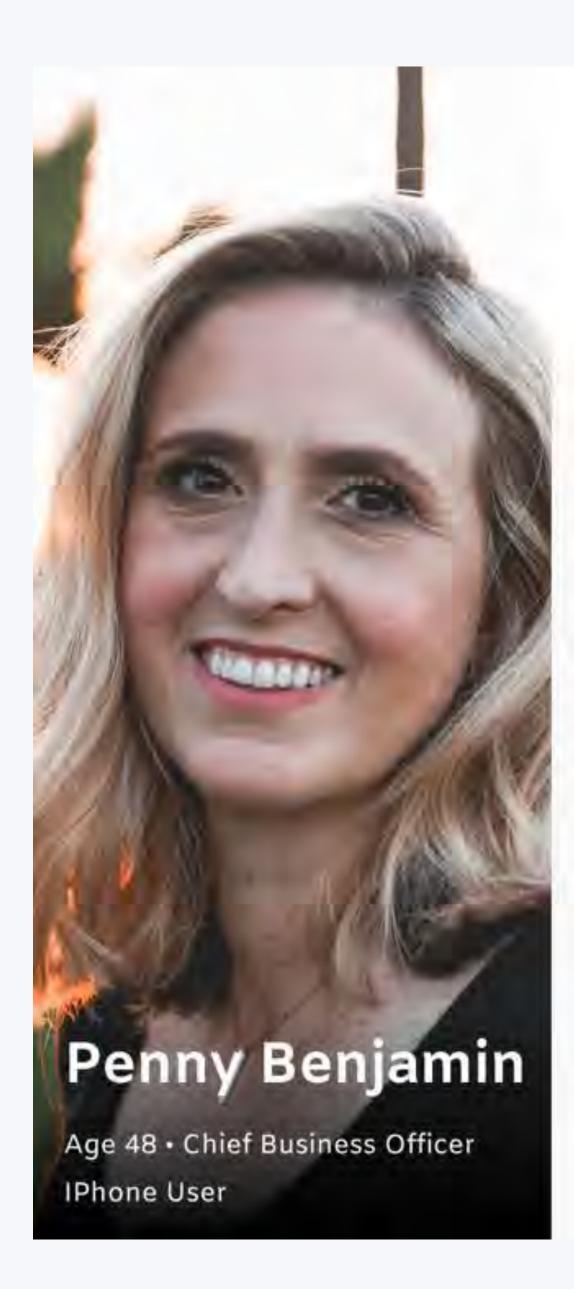
Primary Persona

changes, Penny was still viable as our persona. As the current climate changed, so did Penny's priorities.

Concerns about Covid-19 were top of mind, so we considered how she may adapt.

 Penny is now able to park without using an app, while still minimizing her risk of contracting COVID-19 through this contactless payment method.

This persona is based on research previously done on the mobile app and adapted to the current situation of COVID-19.





Aspirations

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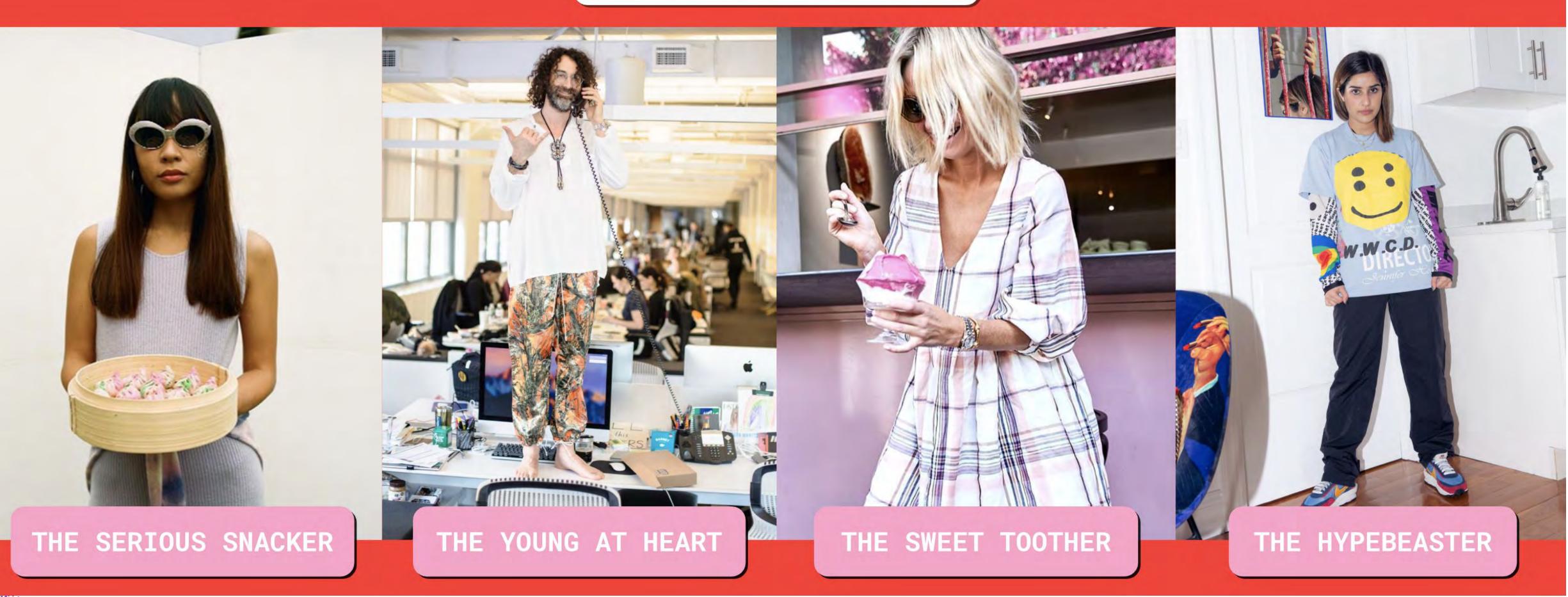
Goodies*

*Profiles, not personas



WHO ARE THE @GETGOODIES GANG?

SNACKING, IT'S A SPECTRUM.





THE SERIOUS SNACKER



18 - 38 years old

75% Female / 25% Male

City Dwellers: NY, LA, MIA, CHI, SF, TX

Millennial

Gen Z

Interested in style, art & culture, style, travel, politics, social causes and home

XXX

Active social media users - SEEKING SNACKS

THE YOUNG AT HEART

28 - 38 years old

25% Female / 75% Male

City Dwellers: NY, LA, MIA, CHI, SF, TX

Millennial

Working professionals across industries

Interested in style, art & culture, style, travel, politics, social causes and home

XXX

Active social media users - SEEKING ESCAPE





THE SWEET TOOTHER

28 - 38 years old

50% Female / 50% Male

City Dwellers: NY, LA, MIA, CHI, SF, TX

Millennial

Working professionals across industries

Interested in style, art & culture, style, travel, politics, social causes and home

XXX

Active social media users - SEEKING INDULGENCE



THE HYPEBEASTER

18 - **38** years old

50% Female / 50% Male

City Dwellers: NY, LA, MIA, CHI, SF, TX

Millennial

Gen Z

Interested in style, art & culture, style, travel, politics, social causes and home

XXX

Active social media users - SEEKING STYLE



