TRANSITion



Innovation Incubator Spring 2023



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Section 01

Introduction

Contents

Problem Statement

Challenges

Problem Statement

Increased opportunities and the ability to work from home supported by unbroken technological connectivity to the workplace have allowed the stressors and anxiety of the workplace to creep deeper into our personal lives.

Then & Now

In the past, work and personal life used to be distinct and separate, with specific times and locations allocated to each. People would go to their workplaces during designated hours and then return home to engage in personal activities. This clear separation allowed individuals to maintain a balance between their work and leisure.

However, when the COVID-19 pandemic forced widespread closures of workplaces, society found itself in an unexpected experiment with remote work. Nearly two and a half years later, organizations globally have established new working norms that acknowledge flexible work as a permanent aspect of the modern working world, rather than a temporary response to the pandemic.

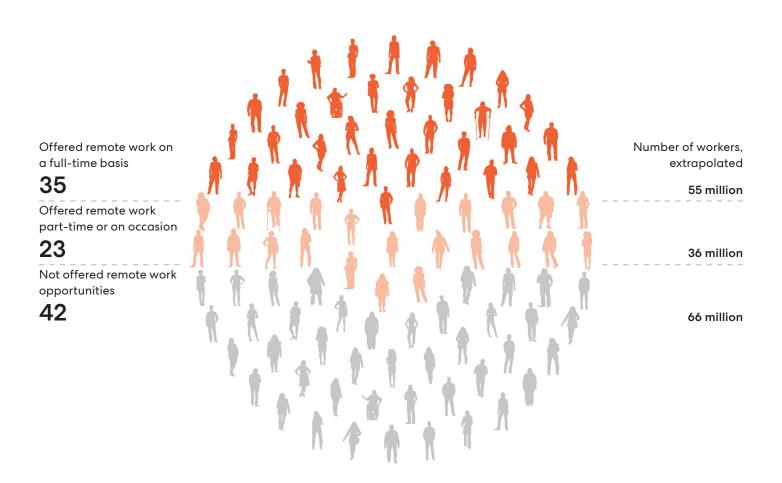
While remote work has been embraced by much of the world, it is not without its disadvantages. These drawbacks

became apparent during the pandemic, as people who had never worked remotely before struggled to separate their work and home lives, especially when both occurred in the same place and often simultaneously.

The pandemic has effectively merged what were once distinct work and home lives into a single blended "work-life smoothie." When working from home, the boundaries between the office and personal space become blurred. Bedrooms are now transformed into home offices, and dining tables and kitchen countertops serve as cluttered desks. The distinction between business hours and personal time fades until individuals inevitably find themselves answering emails in bed and participating in meetings while eating breakfast. As a result, our work-life balance has become quite imbalanced in recent times.

Of job holders in the United States, 58% (the equivalent of 92 million people) say they can work remotely at least part of the time.

Availability of remote-work options, % of employed respondents (n=13,896)



Source: McKinsey American Opportunity Survey Spring 2022

A 25-minute, online-only Ipsos poll conducted on behalf of McKinsey between March 15 and April 18, 2022. A sample of 25,062 adults aged 18 and older from the continental United States, Alaska, and Hawaii was interviewed online in English and Spanish

TRANSITion

Challenges



 Overall health: When there is a lack of clear boundaries between work and personal life, stress levels may begin to rise, resulting in mental health issues like anxiety and depression, as well as a range of associated physical health issues.



Personal time & relationships: Blurred boundaries diminish
personal time and fulfillment, preventing us from fully
engaging in our personal lives. This limitation hinders our
ability to form meaningful connections and relationships with
our family and community, engage in self-care, and pursue
our hobbies. This imbalance ultimately erodes our overall life
satisfaction and contributes to the challenges of burnout.



Efficiency & performance: When workers engage in
multitasking, they split their focus between two or more tasks,
frequently leading to a decrease in quality or productivity.
This concept isn't limited to individual tasks; when attention
is diverted from work during working hours or from personal
matters outside of work, it negatively impacts the quality of
outcomes.



 Technology & connection: Due to constant availability, employees might face the expectation of being reachable and responsive even beyond their standard working hours. The continuous influx of emails, messages, and tasks gives rise to a perpetual state of being "on," which results in increased stress and fatigue.



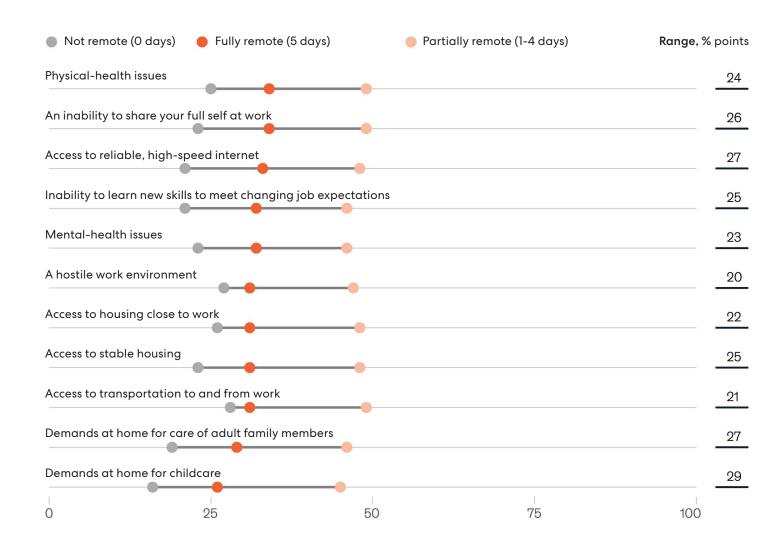
 Recovery time: The absence of opportunities for recuperation because work encroaches into personal time inhibits people from disengaging and recharging. When clear boundaries are in place, it becomes more manageable for employees to distance themselves from work-related sources of stress, fostering ongoing strain but with adequate opportunities for rest.



Demands at home: Insufficient distinction between work
and home life can exacerbate problems, especially when
there are significant domestic responsibilities. Taking care of
adult family members, dependents, and childcare can pose
substantial challenges in a hybrid work environment.

For many working remotely, flexible arrangements still have their challenges.

Factors that impact ability to effectively perform work, % of respondents (n=13,896)

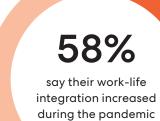


Source: McKinsey American Opportunity Survey Spring 2022

A 25-minute, online-only Ipsos poll conducted on behalf of McKinsey between March 15 and April 18, 2022. A sample of 25,062 adults aged 18 and older from the continental United States, Alaska, and Hawaii was interviewed online in English and Spanish



More than half of the workers say that their work and personal lives have become more intertwined.



44%

are concerned about blurred work-life boundaries

31%
are concerned with the increased time & cost of commuting



believe their mental health decreased significantly 41% believe burnout increased significantly

38% believe engagement/

morale decreased significantly

Source: The Conference Board

The latest workforce survey from The Conference Board captured the thoughts of more than 1,300 individuals—predominantly professional/office workers—from March 14-18. Respondents weighed in on the topics of workplace culture, management, remote work, and more

Section 02

Opportunity

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Future-casting Workshop

Themes

Persona:

Mass Transit

What does the future look like for our clients?

How will people get work done?

How will we collaborate?

How can we as a design community change the course of work in the future?

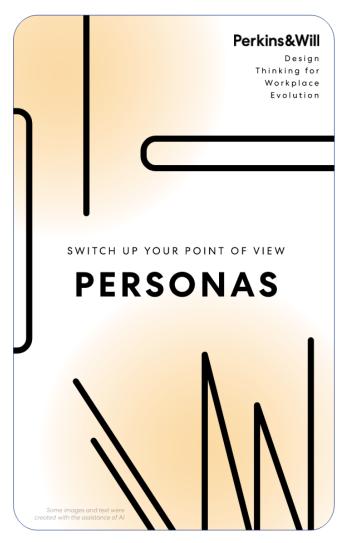
Envisioning the Future of Work

On April 26, 2023, the Austin Perkins&Will office took part in a pilot program known as the Innovation Future-Casting Workshop. Put on by the Innovation Incubator Committee, the workshop included a series of individual and small group designthinking activities, culminating in an idea pitch that was then presented to the Austin studio. Among two others, team TRANSITion was selected by the studio as the most viable and interesting idea to push forward into an incubator grant.

One of the group exercises involved analyzing certain characters for whom a potential idea might be a solution. Upon reviewing the following persona cards, team TRANSITion concluded that a common plight between these four workers might be what is known as leaky work syndrome - an increasing inability to separate work and home life.

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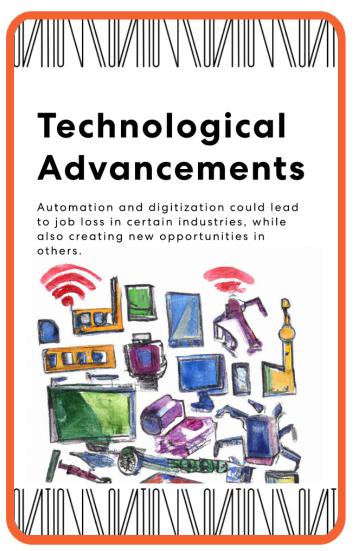


Themes

Innovation Incubator Prompts:

The future of work is expected to involve increased automation and digitization, remote work becoming more common, a focus on skills-based hiring, and a need for ongoing learning and upskilling. Additionally, changes in the job market and work styles are likely to bring about new opportunities and challenges for both employers and employees.





Innovation Incubator Prompts:

The future of the workplace is expected to be more flexible, with a blend of in-person and remote work arrangements becoming more common. Offices may become more agile, as well as increased use of technology to support remote collaboration and communication. In addition, there is likely to be increasing emphasis on employee health and wellness, as well as the adoption of sustainable practices and technologies to reduce environmental impact.





Personas

Team TRANSITion Takeaways:

Mary often thinks she could regulate her emotions more successfully if she had a designated space or time to decompress after a highly-stimulating day at the office.

Kofi is under a lot of pressure while at work, and it's hard to leave these feelings at the door of the hospital. It doesn't help that the lingering stress affects his sleep schedule, when he needs all the hours he can get.



Mary



Meet Mary, a 25-year-old professional who is neurodiverse. She has been diagnosed with ADHD and dyslexia, which can make certain tasks more challenging for her in the workplace. Mary has developed coping mechanisms and has learned to leverage her strengths to excel in her work.

Mary is an advocate for neurodiversity and often speaks at events about her experiences as a neurodiverse person in the workplace. Challenges faced by Mary in the workplace may include: communication; sensory sensitivies; and emotional regulation.





Kofi

age 50



Meet Kofi, a night shift nurse. He has been working at a hospital for the past 20 years, primarily in the emergency department, where he sees patients with a variety of medical conditions. He is passionate about providing high-quality care to his patients.

Working the night shift can be challenging for Kofi, as it requires him to be alert and focused during hours when his body naturally wants to sleep. He also faces the physical and emotional demands of working in a high-pressure healthcare environment.



With many of the personas taking part in some sort of commute, the team wondered if this might be an opportunity on which to capitalize.

Team TRANSITion Takeaways:

Rachel's goal is to be as efficient as possible in her role at the call center. That way she can go home and spend quality time with her son, instead of sitting at her desk worrying about him.

Eduardo's work and social life are often blurred. While he isn't necessarily commuting to the same place every day, it might help to have a ritual to tap into each time he needs to refocus.

Rachel

age 34



Meet Rachel, a customer service representative at a call center. Rachel completed some college courses but was unable to finish her degree due to her responsibilities as a single parent.Rachel is a hard worker and takes pride in her ability to provide for her son.

As a single parent, Rachel faces a number of challenges. She has to balance her work schedule with her responsibilities as a parent, which can be difficult at times. She worries about her child when she is at work, and she has to rely on family and friends to help her with childcare.



Eduardo

age 23



Meet Eduardo, a freelance artist. He recently graduated from a training program and is looking for opportunities to gain real-world experience. He has chosen to pursue freelance work to gain more flexibility and control over his schedule while he finds a full-time job.

At times, Eduardo faces the challenges of managing his own schedule, finances, and workload. He spends most of his time working from libraries or coffee shops. He is very active in online communities and social media platforms to promote work and connect with potential clients.



Mass Transit

"Mass transit is a critical infrastructure of urban environments worldwide. The public uses it extensively, with roughly 9 billion mass transit trips occurring annually in the United States alone."

A Vessel of Potential

Major advances in transportation have occurred every 50-70 years throughout the last two centuries.² The aim of getting mass quantities of people from point to point has largely driven such innovations as planes, trains, and automobiles, transforming how we get to work, home, and everywhere in between.

Historic and contemporary innovations in systems of mass transit are founded on efforts directed at infrastructure, design, and policy. It is through these preestablished lenses that mass transit reveals itself as a vessel ripe for opportunity.

If the benefits of a TRANSITion solution are to save people time, increase passenger comfort, and incentivize use of public transit, then its integration into the transportation conversation is an obvious one.

[1] Rae Zimmerman, (2005). "Mass Transit Infrastructure and Urban Health", Journal of Urban Health: Bulletin of the New York Academy of Medicine Vol 82.01, p. 21–32, Retrieved on 11/2023 from https://doi.org/10.1093/jurban/jti005

[2] AD Editorial Team, (2016). "BIG and Hyperloop One Unveil Designs for Unprecedented Autonomous Transportation System", ArchDaily, Retrieved on 11/2023 from https://www.archdaily.com/799008/big-bjarke-ingels-hyperloop-one-unveil-designs-for-unprecedented-autonomous-transportation-system-uae?ad_medium=gallery

[3] BSR electric, (2020). "Sustainability and Practicability of Electric Buses – Best Practice from Hamburg", Retrieved on 11/2023 from https://www.bsr-electric.eu/news/sustainability-and-practicability-of-electric-buses-best-practice-from-hamburg



TRANSITion

Transit Lens

Infrastructure

Goal

Save Time



"We don't sell cars, boats, trains, or planes. We sell time."2

Why take something on wheels when we could just walk? The answer can be simple: walking won't get us as far in the same amount of time.

Advances in the infrastructure of mass transit have often been focused on making components more efficient and thereby saving users time. The futuristic concept of Elon Musk's 'Hyperloop' is grounded in a very contemporary objective: "to eliminate waiting from the passenger experience." Designs unveiled in 2016 by BIG and Hyperloop One position the system as the logical next step in the timeline of mass transit, "combining the speed of a plane with the capacity of a train and the convenience of a car."

User surveys on ways to improve existing public transit reaffirm that time is indeed of the essence to those participating in the system. On a survey completed in 2020, bus frequency was stated as a top priority by 80 percent of respondents.³ Bus arrival in less than fifteen minutes was the preferred maximum waiting time, as these interim periods constitute much of the total transit time.³

TRANSITion sees the opportunity to recapture time for its users by capitalizing on the moments spent in transit. A more successful transition between work and home means a heightened ability to be present in both spaces. Less leaky work syndrome means more quality time spent with loved ones. By allowing and encouraging users to 'reset' during their commute, TRANSITion 'saves people time' in a novel way.



Transit Lens

Design

Goal

Increase Passenger Comfort



Much of the critique surrounding mass transit addresses the ergonomic and experiential design of the vehicles. Passenger comfort must be prioritized if the goal is to attract ridership. One survey indicates that making rides smoother and quieter, such as those experienced on electric buses, yields a 43 percent increase in passenger satisfaction.³ In 2022, 39 states received \$409.3 million in federal funding to upgrade their conventional bus fleets to zero-emission models over the next ten years.⁴ While the grants are aimed at addressing the climate crisis, it is expected that the upgraded fleets will benefit rider experience as well.

One benefit of a TRANSITion solution is that it may increase a passenger's comfort level even when the design of the experienced transit vehicle falls short. This positions TRANSITion as a useful tool for transit agencies in their quest to improve user experience.

[4] U.S. Department of Transportation, (2022). "President Biden and the U.S. Department of Transportation Announce \$409 Million for 70 Transportation Projects in 39 States | US Department of Transportation", Transportation.gov, Retrieved on 11/2023 from https://www.transportation.gov/briefing-room/president-biden-and-us-department-transportation-announce-409-million-70

[5] Nicholas Dagen Bloom, (2023). "Why the Humble City Bus Is the Key to Improving US Public Transit", The Conversation, Retrieved on 11/2023 from https://theconversation.com/why-the-humble-city-bus-is-the-key-to-improving-us-public-transit-199052



Transit Lens
Policy

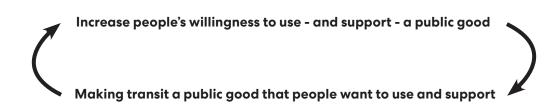
Goal

Incentivize Use

Low ridership can be attributed to the shortfalls inherent within a poorly-funded transit system. As with all public goods, there is a chicken-or-the-egg argument at work: in order to fund the public good, the public must find the good worthy of funding.

Transit thinkers have long hailed Seattle, Washington as a place where citizens understand the value of a well-supported transit system. The city's successful "crusade against driving" saw an 8.9 percent drop in solo commuting between 2010 and 2018.6 Over the years, Seattle voters have signed off on various policies which produce the funds necessary to bolster public transit in the region. Equally important is the accountability of city officials to funnel this money back into the system so taxpayers may see tangible evidence of their continued support.

At the corporate level, it remains imperative that companies incentivize their employees towards the use of public transit. "Taking an approach that incentivizes transit ridership instead of say providing a free parking space at the corporate headquarters puts money back into transit systems while reducing traffic congestion on the roads." In addition to federal and city-wide efforts to make public transit a good worthy of support, TRANSITion can play a role in the corporate sphere as well, especially if a place of employment is the mechanism through which a user 'checks out' a key component of the product.



The TRANSITion solution aims to engage these goalposts that are already inherent to the conversation of mass transit. If TRANSITion is successful it would be innovative in its ability to address all three.



Save Time
Increase Passenger Comfort
Incentivize Use



Section 03

Vision

Contents

Vision

Strategies

Goals & Obiectives

Methodology

Vision

Capitalize on the underutilized time in commute between work and home to reset the brain while increasing separation between work life and personal life.



What do we want to achieve?

- Increase separation between work life & personal life
- Reset the brain during the transition
- · Capitalize on commute time

Strategies



Compartmentalize: Create and increase separation between
work and personal life. Establish work-free zones in specific
places or times when work-related activities are not allowed.
By keeping a physical boundary between your office and
personal, you can create time and space for your personal life.



Capitalize on time: The national average commute time
to work in the U.S. is 26.6 minutes, according to the Census
Bureau. Hence, the daily average American commute time is
just under an hour, at 53.2 minutes. The idea is to capitalize
on this underutilized time in transitioning between work and
home.



Incentivize mass transit: It is no secret that mass transit has
significant benefits, both to individuals and the community.
Hence, one of our key strategies is to promote the use of mass
transit by incentivizing it and reducing the dependency on
private vehicles.



 Leverage technology: While technology can contribute to blurred boundaries, it can also be harnessed effectively to support work-life integration. Create digital boundaries by instituting specific time periods free from technology or by restricting the use of work-related apps and notifications during personal hours.



• Reduce stress & prevent burnout: Situational factors are the biggest contributors to burnout, so changes at the employment level are often required to address it. However, there are steps one can take on their own or with help that can help lower stress & prevent burnout.



 Improve physical health & wellbeing: Improving physical health & wellbeing can directly lead to lower stress levels & higher efficiency. Hence, promoting self-care & improving the physical health of individuals is one of our key strategies.



 Increase workplace efficiency and performance: Separating your personal from your work life can also increase your work productivity.

Vision Strategies Objectives

What do we want to achieve?

How will we achieve our Vision?

- Increase separation between work life & personal life
- Reset the brain during the transition
- · Capitalize on commute time
- Compartmentalize
- Capitalize on time
- · Incentivize mass transit
- Leverage technology
- Reduce stress & burnout
- · Improve physical health & wellbeing
- Increase workplace efficiency & performance

Goals & Objectives



• **Establish work-free zones:** Establishing work-free zones is key to separating work & personal aspects of life. Creating this non-work space at a certain time is the first step to a successful separation.



 Target Commute: The time right before/after work can be crucial for the separation. With the amount of commute time available to people, it is imperative to target this spare time to develop healthy habits.



 Increase public transit ridership: The project aims to incentivize public transit by providing a product that helps to better separate work & home. Hence, one of the goals is to increase mass transit ridership and measure success in an objective way.



 Develop a prototype: TRANSITion is a prototype of a product that helps people reset before/after work. It will leverage productivity tools and apps to streamline tasks, manage time, and enhance productivity.



Promote self-care activities: Helping schedule regular self-care activities will promote relaxation, well-being, and personal fulfillment. This can include exercise, hobbies, spending time with loved ones, or engaging in activities that recharge and rejuvenate you.



Invest in your health: Make physical and mental exercise
part of your routine. Establishing boundaries to distinguish
between your professional and personal life not only enhances
work efficiency but also alleviates stress in your personal life.
Both of these factors contribute to increased relaxation and a
decreased risk of burnout.



 Provide productivity & time-management tools: Helping create a work schedule that allows one to complete tasks effectively without the need to cut into their personal time. TRANSITion

Vision Strategies Goals & Objectives

What do we want to achieve?

- Increase separation between work life & personal life
- Reset the brain during the transition
- · Capitalize on commute time

How will we achieve our Vision?

- Compartmentalize
- Capitalize on time
- Incentivize mass transit
- Leverage technology
- · Reduce stress & burnout
- · Improve physical health & wellbeing
- Increase workplace efficiency & performance

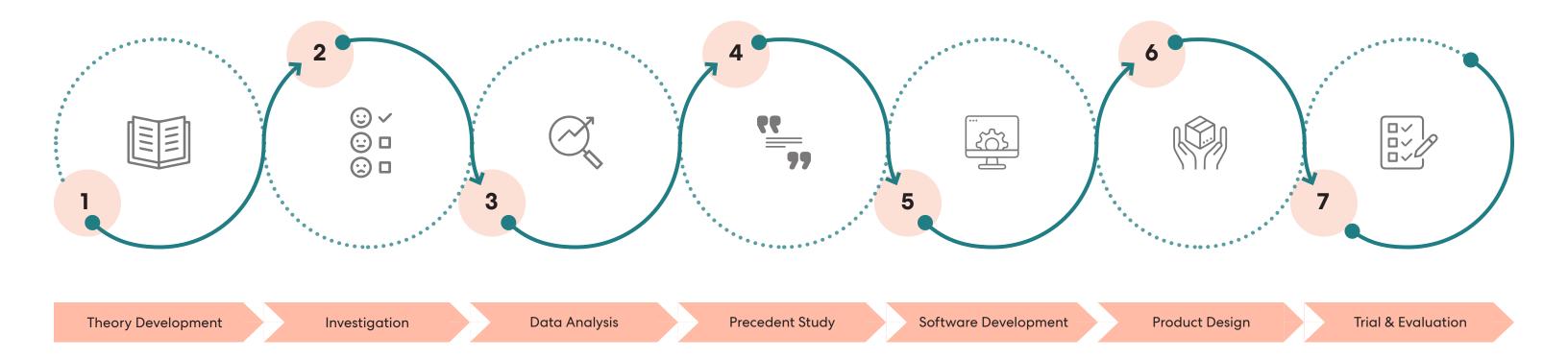
How will we gauge the success of our strategies?

Innovation Incubator | Spring 2023

- · Establish work free zones
- Target commute
- · Increase public transit ridership
- Develop a prototype
- Promote self-care activities
- Invest in health assets
- Provide productivity & timemanagement tools

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Methodology



Section 04

Investigation

Contents

Survev & Assessment

Studies & Precedents

Survey & Assessment

We conducted an online survey within our Austin P&W studio to investigate the separation between work and personal lives, along with habits and strategies.

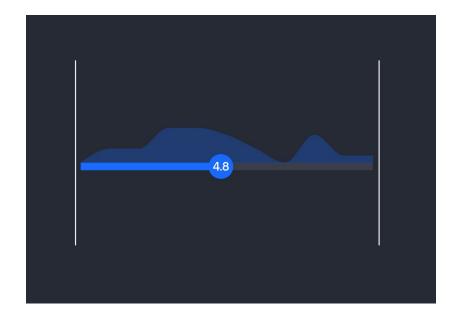
Questions 12

Respondents 26

Participation 82%



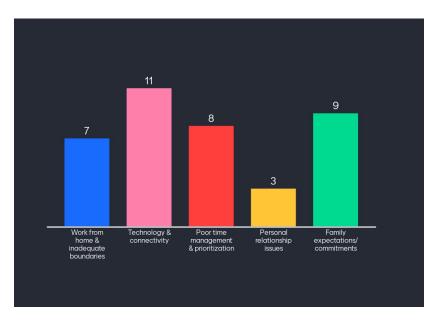
1. How often do you find yourself distracted by work issues at home?



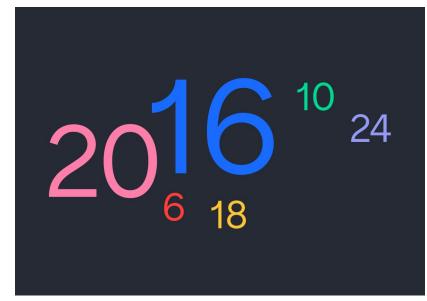
2. How often do you find yourself distracted by home issues at work?



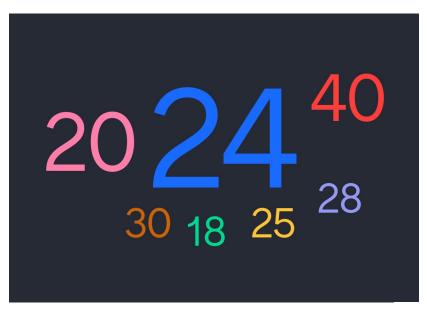
3. What factors negatively reinforces the lack of separation between your work & personal life?



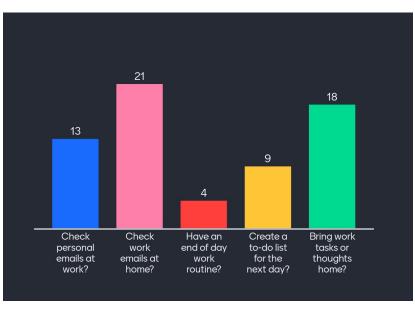
4. On average, how many hours per week do you work at home?



5. On average, how many hours per week do you work at the office?



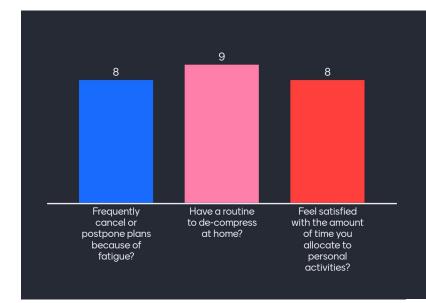
6. Work Habits - Do you:



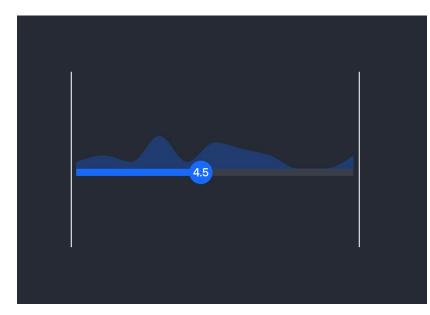
7. On average, how many hours per week do you typically dedicate to personal activities (hobbies, family/friends, relaxation, exercise, etc.)?



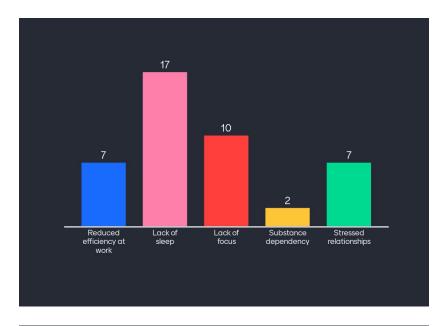
8. Personal Habits - Do you:



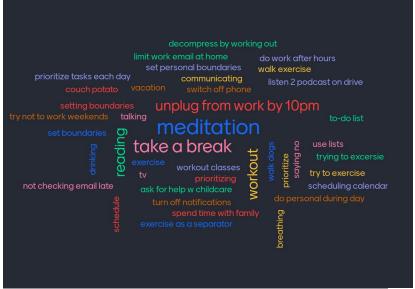
9. How has the lack of separation between work place and home affected your overall well-being?



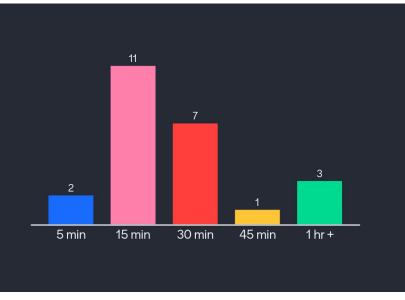
10. How does the lack of separation manifest in your day to day life?



11. What strategies or methods do you use to cope with the challenges of balancing work and personal life?



12. How much time do you spend on your one-way commute to/from work/ home?



Studies: VR Meditation

Numerous research investigations have explored the effects of Virtual Reality meditation as a technique aimed at disconnecting the mind from the stressors associated with work and personal life. These studies have shown that it contributes to enhancing overall employee well-being, bolstering holistic functioning, fostering greater mindfulness, reducing stress, and enhancing sleep quality.

University of Colorado Anschutz Medical Campus

<u>Utilization of Virtual Reality Mindfulness Application to Reduce Stress and Promote Wellbeing in University Students</u>

FIU

A Holistic Approach to Employee Functioning: Assessing the Impact of a Virtual-Reality Mindfulness Intervention at Work

Scientific Reports

A randomised pilot trial of virtual reality-based relaxation for enhancement of perioperative well-being, mood and quality of life

ResearchGate

Effect of a Mindfulness intervention with virtual reality in adolescents on Attention and working memory

National Library of Medicine

<u>Virtual Reality Therapy in Palliative Care: A Case Series</u>

SpringerLink

<u>Virtual Reality for Enhancement of Emotional Mindset in the First Lockdown of United Kingdom for the Covid-19</u>

Pandemics

Association of Computing Machinery

How Virtual Reality Influenced Emotional Well-being Worldwide During the Covid-19 Pandemics

Precedents: VR Meditation

TRIPP

A Guided Virtual Reality Meditation App

Key Initiatives

- Explore mesmerizing worldscapes
- Guided visualizations
- Applied mindfulness techniques
- · Soothing binaural audio
- · Captivating breathing exercises

Goals & Benefits

- · Elevate well-being
- Foster team building and collaboration
- · Unlock creative capacity
- · Reduce anxiety
- Manage depression

Features

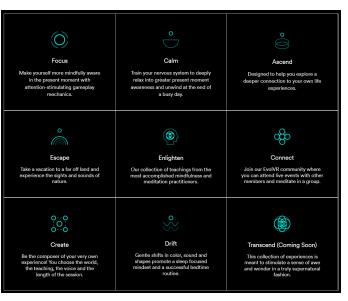
- Focus
 Connect
 - Calm · Create
- · Ascend · Drift
- Escape
 Transcend
- Enlighten

Awards

- · Best Meditation App (2023), Tom's Guide
- TIME Best Inventions (2022), TIME
- Innovation Award (2022), CES
- · Best VR Meditation App (2021), Men's Health







Source: TRIPP, https://www.tripp.com/

Studies: VR on Wheels

Imagine if the time spent commuting could become more productive, social, and enjoyable than ever before. Numerous research studies are currently delving into this inquiry, as they delve into the captivating world of virtual reality experiences on buses, an emerging trend that has the potential to transform our travel experiences.

University of Glasgow

<u>"Reality Anchors": Bringing Cues from Reality into VR on Public Transport to Alleviate Safety and Comfort</u>
Concerns

Association of Computing Machinery Digital Library

<u>Surveying the Social Comfort of Body, Device, and Environment-Based Augmented Reality Interactions in Confined Passenger Spaces Using Mixed Reality Composite Videos</u>

IEEE Xplore

<u>Virtual Reality in transit: how acceptable is VR use on public transport?</u>

SpringerLink

Challenges in passenger use of mixed reality headsets in cars and other transportation

Meta

Meta and BMW: Taking AR and VR Experiences on the Road

Medium

<u>Immersive Adventures: Virtual Reality Experiences on Buses</u>

Precedents: VR on Wheels

FlixVR

The World's 1st VR Long-Distance Bus Experience

Experience

Certain FlixBus travelers will have the opportunity to commence their journey with FlixVR, an innovative virtual reality (VR) pilot program on extended bus routes, powered by Inflight VR. Inflight VR has employed a platform that is already approved for aviation, making only minimal adjustments to accommodate the bus environment. Longhaul buses traveling to various destinations in the United States will feature VR entertainment, offering around 50 games, travel experiences, and cinematic content.

Partners

- Inflight VR
- Pico



Routes

- · University of Arizona Phoenix Airport/Flagstaff
- University of Arizona Las Vegas Strip
- Tempe Las Vegas Strip
- · LA Downtown Las Vegas Strip
- · San Diego Las Vegas Strip

Outcome

The Inflight VR bus solution demonstrated strong suitability for on-road use. A high comfort rating significantly reduced concerns regarding the use of VR in an environment as dynamic as a bus. FlixBus is actively working on modifying processes and introducing incentives to encourage even greater adoption of the product.











Source: FlixBus, https://www.flixbus.com/virtual-reality



45 Source: FlixBus VR on the road, https://www.virtualrealitymarketing .com/case-studies/flixbus-vr-on-the-road/

Section 05

Prototype

Contents

Overview

Key Features

User Journe

Prototype Framework

Application Architecture

Application Wireframe



Overview

TRANSITion is a passenger-focused solution aimed at making commuting on public mass transit more relaxing, while creating an opportunity for commuters to reset.

It offers a seamlessly integrated hardware and software platform that maximizes the use of existing VR headsets to provide a diverse range of content and services.



TRANSITion's vision is to capitalize on the underutilized time in commute between work and home. By offering a platform for resetting the brain, it helps users establish a clear demarcation between work life and personal life. This crucial boundary is essential for maintaining mental health, reducing stress, and fostering a healthier work-life balance.

With TRANSITion, your daily commute is no longer a tedious and unproductive endeavor. It becomes an opportunity to refresh, recenter, and prepare for what lies ahead. Say goodbye to the stress of work spilling into your personal life, and hello to a revitalized, more balanced existence.

TRANSITion is not just a product; it's a lifestyle transformation. It empowers you to reclaim control over your time, reduce the daily grind, and rediscover the joy of separating work from personal life. Don't just commute; TRANSITion and transform your daily journey today.

Key Features



VR Headsets on **Public Mass Transit**

TRANSITion's core innovation is the integration of Virtual Reality (VR) headsets within the public mass transit systems. These headsets offer a private escape within the bustling confines of your daily commute, ensuring that your transition from work to personal life is smoother than ever.



Community & Social Integration

Connect with fellow commuters through the TRANSITion community. Share your experiences, tips, and even collaborate on projects with likeminded individuals. Social integration enhances the sense of belonging and community.



Online Platform Access

With a seamless link to a dedicated online platform, TRANSITion users gain access to a treasure trove of relaxation and productivity tools. The app is your gateway to a world of immersive experiences and useful assistants, designed to enhance your well-being and productivity during transit.



Offline Mode

For those moments when you want to disconnect from the digital world, TRANSITion offers an offline mode. Enjoy calming, pre-loaded VR environments and activities without an internet connection.



Customizable **Experience**

The TRANSITion experience is highly customizable to meet your unique preferences. Adjust your VR environment, choose the soundscape, or pick the productivity assistant that suits your current needs. This tailored approach ensures that you make the most of your transit time.



Security & Privacy Measures

Safety is a top priority. TRANSITion ensures that users' personal data and experiences are kept secure through robust privacy measures. Your commute remains a protected and private space.



Tools & **Assistants**

On the TRANSITion platform, users can choose from an array of relaxation and productivity products. Whether you wish to unwind and reduce stress or make the most of your transit time to plan for the day ahead, TRANSITion has you covered.



experience that leaves you refreshed, inspired, and empowered.

Progress Tracking & Analytics

TRANSITion is designed to be a comprehensive solution, adapting to your

needs and preferences while maximizing your commute's potential. It's not just about separating work and personal life but about crafting an entire journey

> The TRANSITion platform provides users with insights into their well-being and productivity. Track your progress over time, set goals, and receive personalized recommendations to make the most of your commute.



Wellness and Health Monitoring

TRANSITion goes beyond relaxation by incorporating health and wellness monitoring features. Track your stress levels, heart rate, and other vital statistics to ensure your commute contributes positively to your overall well-being.



Compatibility with Existing Devices

TRANSITion seamlessly integrates with your existing devices, such as smartphones and wearables. Sync your schedule, receive notifications, and make a smooth transition from your commute to your destination.



Custom **Content Creation**

Advanced users have the option to create their VR environments and content, tailoring their TRANSITion experience to their exact specifications. This feature encourages creativity and personalization.



Gamification and Challenges

Stay engaged and motivated by participating in gamified challenges and activities. Compete with other commuters or challenge yourself to complete tasks and earn rewards for a sense of accomplishment.

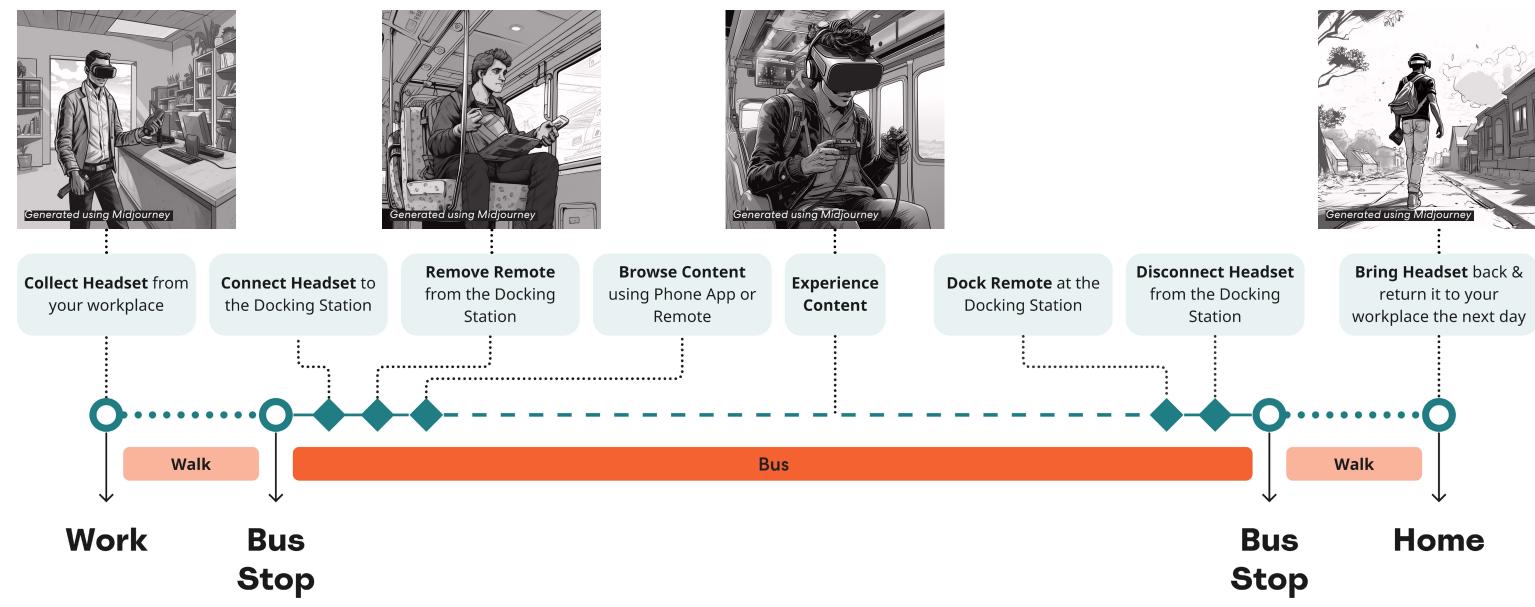
User Journey

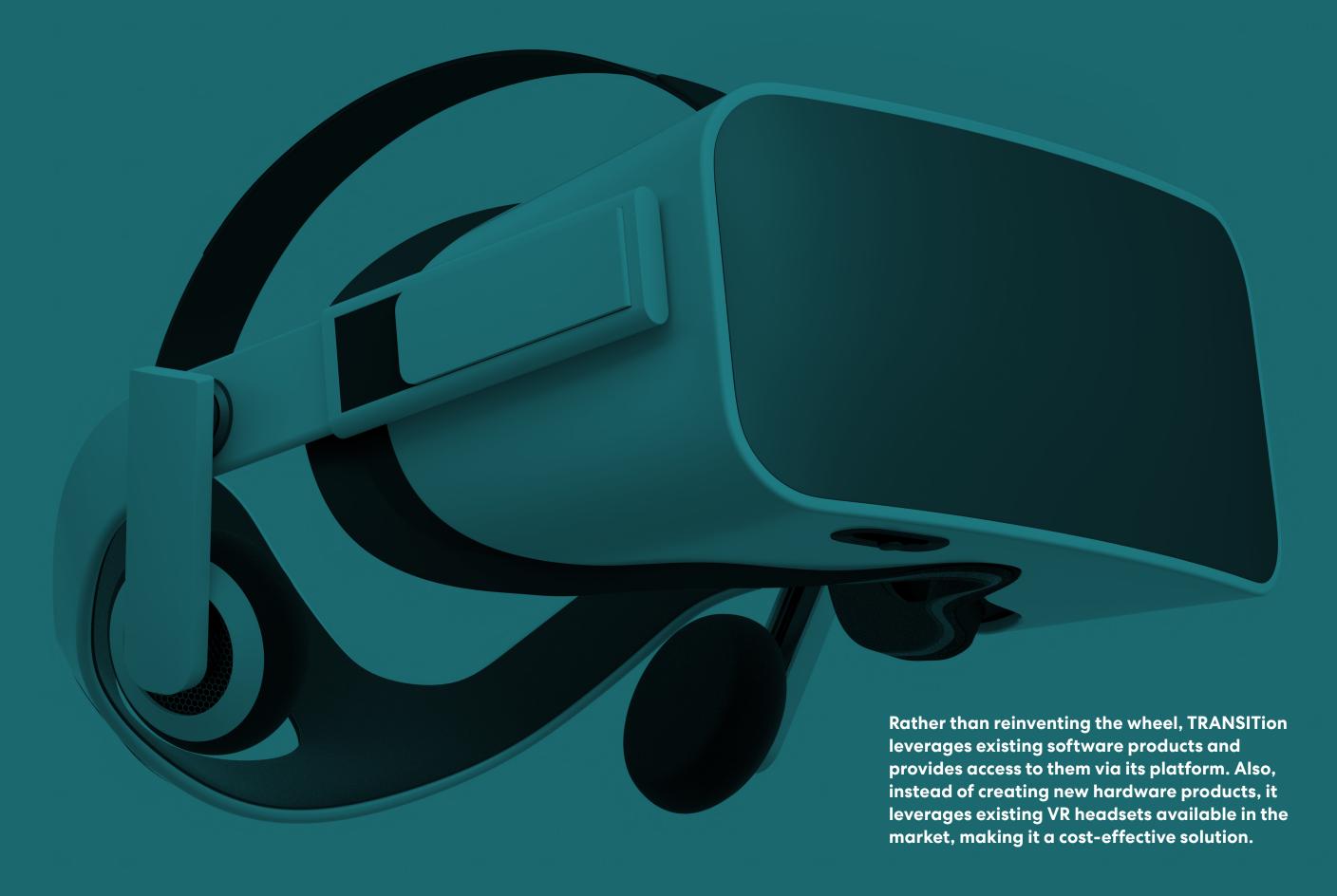
- 1. Collection: Employers or transit agencies provide commuters with dedicated VR headsets. Eligible employees can check the device out at their workplace, to take with them on their commute home. Individuals can also subscribe to an individual usage plan and receive a headset via mail.
- **2. Dedicated VR Headsets:** These headsets are specifically designed for in-transit use and are separate from commuters' personal smartphones. The VR headsets are designed for passenger comfort and are adjustable to accommodate various head sizes.
- **3. Dedicated VR Remote Controllers:** Buses will have dedicated controllers for the VR Headsets fixed to the VR docking station behind individual seats. Commuters can choose to either use the TRANSITion app on their phones or the VR controllers to navigate through the content on the VR headset.

- **4. Content Selection (Pre-loaded Content):** The VR headsets come pre-loaded with a selection of VR content, including movies, 360-degree videos, virtual tours, games, and other experiences. Passengers will need to use the dedicated VR controllers to access this content.
- 5. Content Selection (TRANSITion App): Commuters also have the option to use their smartphones or tablets to control or navigate the VR experience. In this case, commuters can download the TRANSITion App on their mobile phones or tablets. The app will allow them to browse

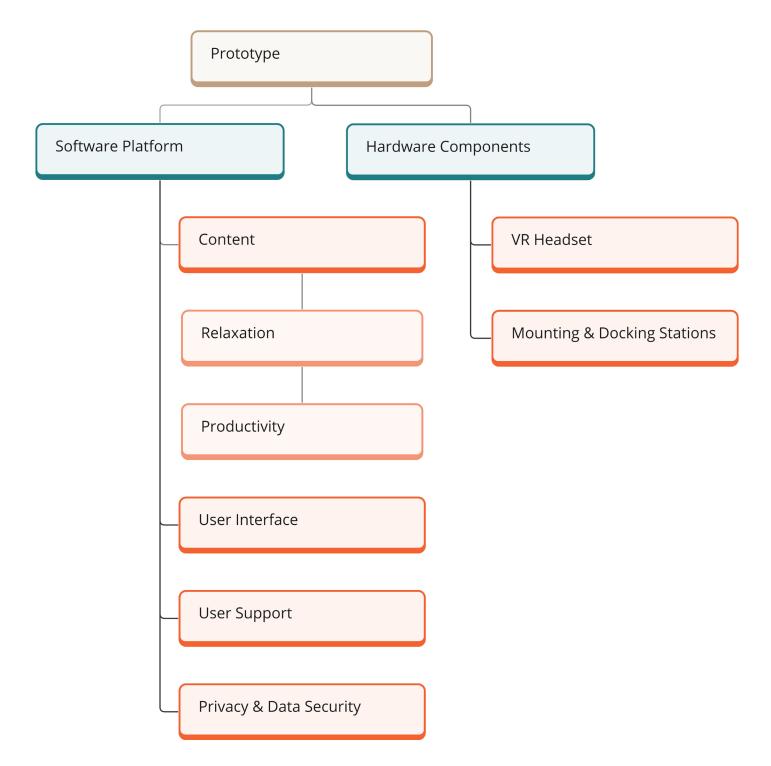
the content library, control the playback of movies or videos, or customize their VR experience.

6. Return: Once commuters are done using the VR headsets, they unplug them and dock the VR remote controllers at the docking station. They then carry the headset home and either return it at their workplace the next day (if applicable employees) or keep it with them for further use (if individual subscribers).





Prototype Framework



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Software Platform (Application):

1. Content: Passengers can access the content via a secure online platform, linked to the VR headsets on the mass transit vehicle. It is designed to offer two primary categories of content: "Relaxation" and "Productivity".

Relaxation Assistant:

- · Meditate
- Listen (Music, Podcasts, Radio)
- Read (Books, Magazines, News)
- Play (Games, Simulation)
- Breathe (Practice Deep Breathing)
- · Watch (Movies, Shows, News)
- Nap

Productivity Assistant:

- End Workday (Routine)
- Manage (Time Management, Planning)
- · Plan (Meals, Grocery Lists, Vacations)
- Learn (Education, Skill Development)
- · Practice (Workout Tutorials, Training, Healthy Eating)
- · Call (Friends, Family)
- Inform (News, Updates)
- **2. User Interface:** An intuitive and user-friendly interface accessible through the VR headset that allows passengers to select their preferred mode (Relaxation or Productivity) and navigate content seamlessly.
- **3. User Support:** Passengers have access to a support system through the platform to address technical issues and inquiries during their commute.
- **4. Privacy & Data Security:** The platform implements robust privacy measures to protect passengers' personal data and ensures compliance with data protection regulations.

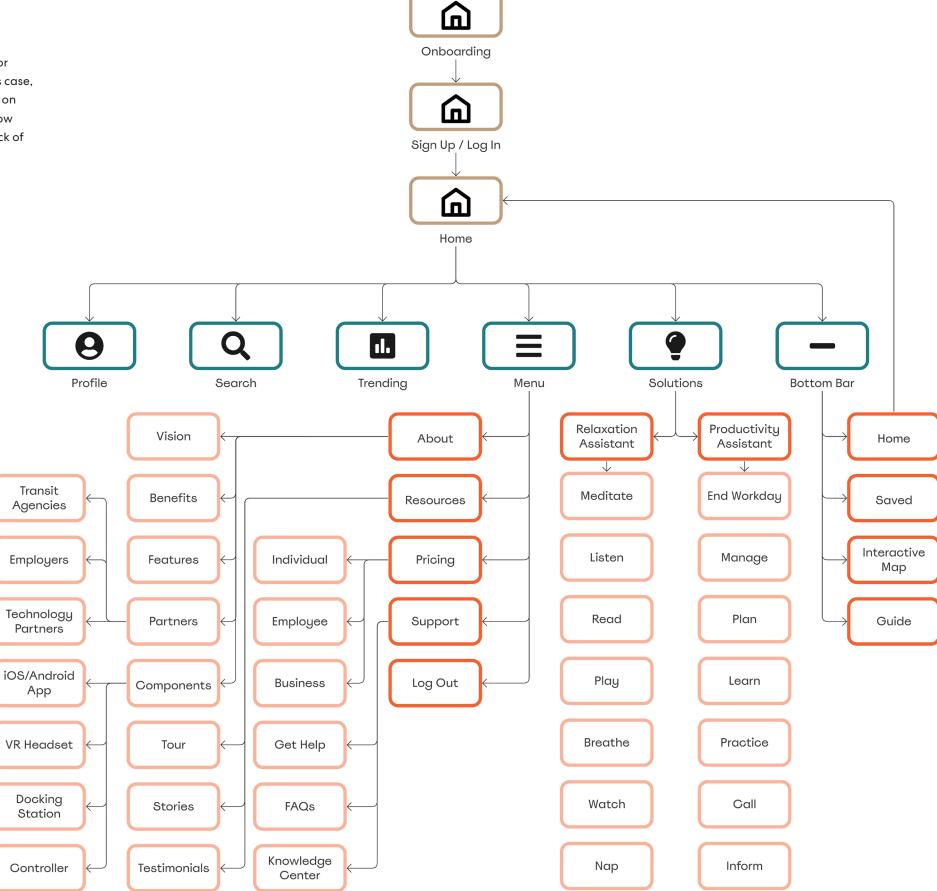
Hardware Components:

- **1. VR Headsets:** TRANSITion utilizes existing VR headsets that are known for their comfort and adaptability, making them suitable for a diverse range of passengers.
- Headset Display & Lenses
- Positional Tracking Sensors
- Motion Sensors
- Audio Systems
- · Headset Straps
- Power Source
- **2. Mounting and Docking Stations:** Mass transit vehicles are equipped with specially designed docking and mounting stations to securely store and charge the VR headsets. This ensures that the headsets are accessible to passengers throughout their journey and are always ready for use.
- Computing Hardware
- Controller
- Connectivity Cable
- Charging & Power Supply
- Mounting & Secure Storage
- Safety Measures
- Management & Support
- Testing & Maintenance

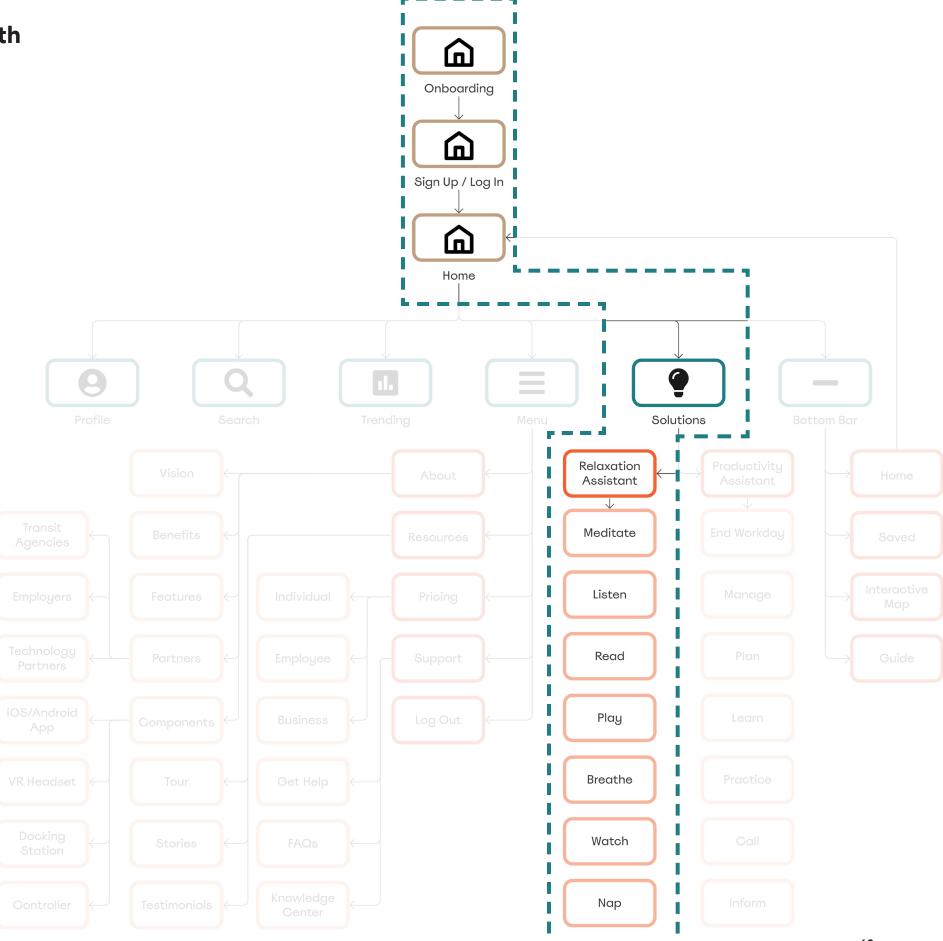
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Application Architecture

Commuters have the option to use their smartphones or tablets to control or navigate the VR experience. In this case, commuters can download the TRANSITion application on their mobile phones or tablets. The application will allow them to browse the content library, control the playback of movies or videos, or customize their VR experience.



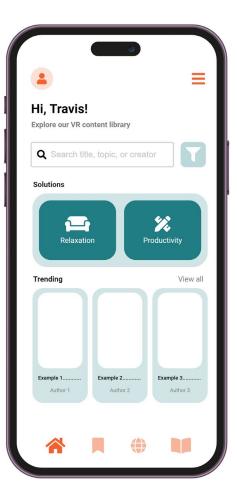
Application Wireframe Path

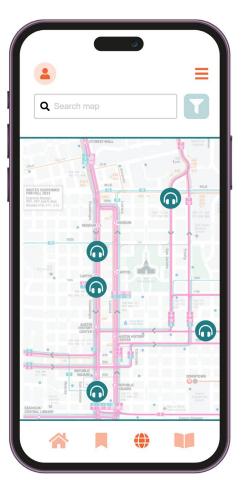


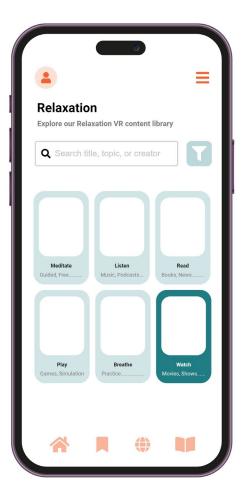
Application Wireframe

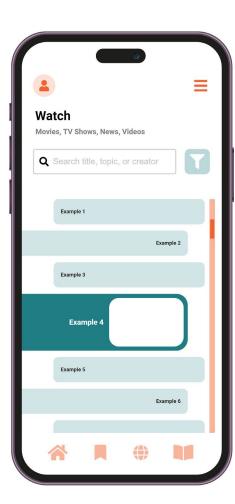












Onboarding Sign In Home Interactive Map Relaxation Watch

Section 06

Conclusion

Contents

Benefits

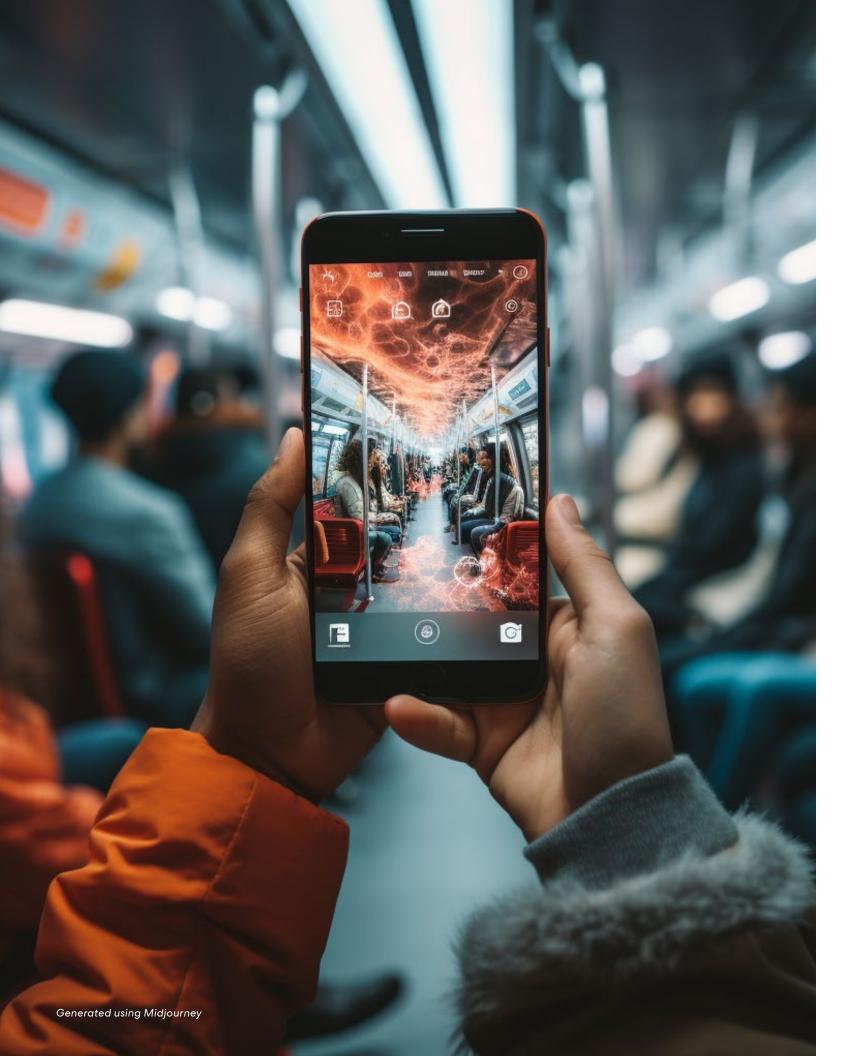
Potential Future Enhancements

Next Steps

Benefits

- Enhanced Well-being: TRANSITion contributes to
 passengers' mental and emotional well-being by providing
 a serene escape during the commute, reducing stress levels,
 and promoting relaxation. This can lead to improved mental
 health and overall satisfaction.
- Improved Health and Fitness: Includes fitness and healthrelated VR modules, such as guided exercise routines, stretching exercises, wellness tips, promoting passengers' physical health during transit.
- Increase Separation between Work & Home: The time right before/after work can be crucial for the separation.
 Hence, establishing work-free zones right after work is key to separating work & personal aspects of life.
- Improved Focus and Productivity: Passengers who choose the productivity mode can utilize their commuting time more effectively, thereby enhancing productivity. This can be particularly beneficial for remote workers or students.
- Increased Public Transit Ridership: The project aimed to incentivize public transit by providing a product that helps to better separate work & home. Hence, one of the benefits of the project will be the increase in mass transit ridership.
- Monetization Opportunities: TRANSITion can open up additional revenue streams for mass transit operators through partnerships with content providers and premium subscription models, which can help offset operational costs. Another benefit is that it maximizes the use of existing VR hardware & software tools, hence minimizing additional capital expenses.
- Resilience: By encouraging the use of public mass transit,
 TRANSITion indirectly contributes to reducing individual car
 usage, traffic congestion, and greenhouse gas emissions,
 thus supporting environmental sustainability.





Potential Future Enhancements

- Virtual Social Interaction: Integrate features that allow passengers to interact with others on the same transit route, enabling virtual social connections during the commute, which can be particularly valuable for remote workers or commuters seeking social engagement.
- Integration with Augmented Reality (AR): Incorporate AR
 technology into the platform to overlay virtual information
 on the physical environment outside the vehicle, providing
 informative or entertaining context during the journey.
- Personalized Content Recommendations: Implement
 machine learning algorithms to analyze passengers' usage
 patterns and preferences, offering personalized content
 recommendations that evolve over time.
- Environmental Sensors: Install environmental sensors within the mass transit vehicles to offer real-time information on air quality, temperature, and humidity, allowing passengers to make informed choices for a healthier commute.
- Language Learning Modules: Offer language learning modules for passengers interested in acquiring new language skills or practicing existing ones.
- Advanced Data Analytics: Utilize advanced data analytics
 to gain insights into passenger behavior, preferences, and
 transit patterns, which can inform content updates and
 service improvements.
- Content Creation Tools: Provide a platform for users to create and share their content, fostering a community of content creators and enhancing the library of available experiences.
- Integration with Smart Cities: Collaborate with smart city initiatives to provide real-time transit information, optimize routes, and contribute to a seamless and efficient urban mobility ecosystem.

Next Steps

Prototype Mockup

Creating a physical prototype mockup for TRANSITion is an exciting step that will help showcase the concept's potential and functionality. The physical prototype mockup should be presented in an interactive and engaging manner, allowing potential stakeholders, investors, and users to experience the concept firsthand. It should demonstrate the key features and functionality of TRANSITion while emphasizing the user's ability to personalize their transit experience effectively. This prototype will serve as a powerful tool for garnering interest and support for its development.

- Headset and Wearable Components: The central element of the prototype is the VR headset, representing the core technology. This can be a modified commercial VR headset or a custom-designed one with the TRANSITion branding.
- Interactive Control Unit: To control the VR experience, a compact and user-friendly control unit is included. It can be a handheld device that can be a part of the docking station behind the seat.
- Online Platform Simulation: Create a simulated version
 of the online platform on a tablet or smartphone,
 which will be connected to the VR headset via a secure
 interface. This representation should demonstrate
 how users can access and customize the content for
 their commute.
- VR Environment Models: Showcase several predesigned VR environments, reflecting various relaxation and productivity scenarios. These can be small dioramas or models, offering a glimpse into what users might experience during their commute.
- Community and Social Integration: Emulate the
 community and social features by displaying user
 profiles, comments, and interaction possibilities on a
 separate screen or tablet. This will provide a sense of
 how users can connect with others during their transit.
- Safety Measures and Data Security: Include visuals or infographics that demonstrate the safety and privacy measures in place, highlighting the importance of safeguarding users' personal data and well-being.



Usability Testing

Usability testing is a critical phase in the development of TRANSITion, allowing us to assess how well the product functions in a real-world context and how users interact with it. This information is invaluable for refining the product, ensuring it meets the needs of its target audience, and creating a user-friendly, enjoyable, and functional solution for separating work and personal life during commutes.

- Recruitment of Test Participants: Identify a diverse group of test participants who represent the target audience for TRANSITion.
- **Test Environment Selection:** Choose a controlled and safe environment for the usability testing.
- Test Scenarios and Tasks: Develop a set of realistic scenarios and tasks that users might encounter during their daily commute.
- Moderation and Observation: Appoint a skilled moderator who can guide participants through the test scenarios while observing their interactions with the prototype.
- **Data Collection:** Record the usability testing sessions, capturing both the user's interactions with the product and their facial expressions and verbal feedback.
- Post-Session Interviews: Conduct brief postsession interviews with each participant to gather qualitative feedback.
- Iterative Testing and Improvements: Based on the feedback and insights gathered, make iterative improvements to the product prototype.
- Repeated Testing: Repeat the usability testing process with new participants, incorporating the modifications made after the initial round of testing.
- Data Analysis: Analyze the data collected from usability testing to identify common pain points, patterns of user behavior, and areas of improvement.
- Reporting and Documentation: Create a comprehensive usability testing report that summarizes the findings & recommendations.

TRANSITion

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Reflection

After conducting usability testing for TRANSITion, it's essential to engage in a reflection process to gain insights and understanding of the outcomes, implications, and next steps. Reflection provides a valuable opportunity to learn from the testing process and make informed decisions about the product's future. It ensures that the product aligns with user needs and expectations while maintaining a clear focus on its core goal of separating work and personal life during commutes.

- Identify Usability Issues: Categorize and prioritize usability issues and challenges encountered during testing.
- Evaluate User Feedback: Analyze the qualitative feedback gathered from participants.
- Compare with Design Goals: Compare the usability testing results with the initial design goals and objectives for TRANSITion.
- Stakeholder Input: Seek input from relevant stakeholders, including the development team, designers, and project sponsors.
- Define an Action Plan: Create a clear and actionable plan for implementing the recommended improvements.
- **Reflection Meeting:** Convene a reflection meeting with the project team to discuss the findings, proposed improvements, and the action plan.
- Future Iterations: Keep the door open for future iterations of usability testing as the product evolves. Continuous improvement based on user feedback is key to making TRANSITion a successful and usercentric solution.

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