



ADOPTING A PLANT-RICH DIET

Designing Behavior Change



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THE OPPORTUNITY

We see opportunity to shift the norm for diets.

People have grown accustomed to hearing that they should eat less meat. They know vegetables are healthy, and they know too much meat can be harmful. But knowing does not translate to action. Why?

Food is emotional. It is a source of pleasure and togetherness. It connects us to our families and our cultural traditions. It is an expression of who we are. Food is also practical. We get our food from certain sources, at certain times in our schedules. We know certain recipes, and have developed skills preparing certain foods. Families develop menus together, and this can be a delicate negotiation, especially when small children are involved.

In all this, meat often plays the central role in many meals—and therefore a complicated element to change. How can we overcome all this and persuade people to reduce meat consumption and add more plant-based food to their diets?



“By seeing food choices as the daily outcomes of beliefs and habits built over time, we are able to think through what a journey to reshaping these beliefs and habits could look like, leveraging existing frames, like social influence, to make the change stick.”

– **Natalia Paine**

Food Marketing Manager, Rare’s US Climate Change program

Changing this behavior requires shifting beliefs.

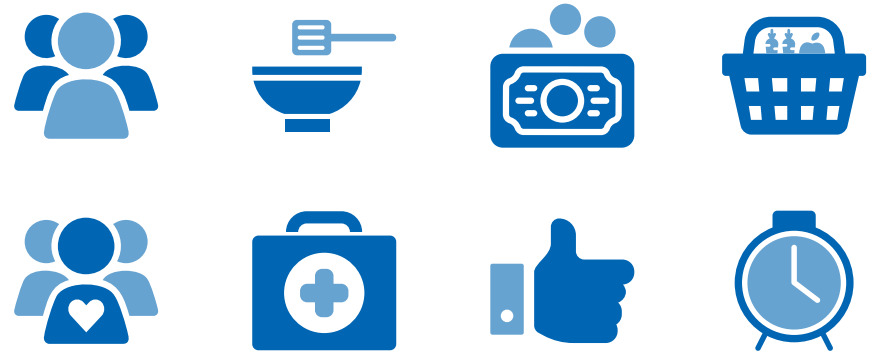
Changing behavior is rarely easy. However, behavior science provides insights on what levers best drive behavior change. What a person believes about a behavior is critical. And an important lever for changing that belief is the social influence from key relationships.

A particular personal internal belief and the related external social influence is what we call a psycho-social state. For any behavior, if select psycho-social states are shifted, the likelihood of behavior change increases.

For example, that is to say, if others in your reference network—people whose beliefs and opinions you care about—believe a behavior is important or good, you begin to believe it too, and you're then much more likely to engage in that behavior.

Psycho-social states are the beliefs to change.

To drive behavior change, Rare brings together essential disciplines. First, behavioral science uncovers the key psycho-social states required for the change. Second, service design works with behavior science, marketing, and additional experts to develop interventions capable of shifting the psycho-social states and driving the behavior change.





THE APPROACH

Identify, prototype, and test the way to shift psycho-social states.

The first step to identifying the psycho-social states is to analyze existing research, looking for factors that evidence suggests will drive behavior change.

These factors are formatted in the following form: "If _____, then I will be more likely to adopt a plant-rich diet." These statements are affinitized and analyzed by behavioral scientists to yield the psycho-social states contributing to behavior change.

Plant-Rich Diet Psycho-social States

These are the psycho-social states to shift.



Empirical Expectations:

I believe that those in my reference group are eating less meat.



Action Knowledge:

I have the know-how required to prepare meatless meals.



Normative Expectations:

I believe that those in my reference group think I should be or are OK with me eating less meat.



Health:

I believe that non-meat dishes are healthy.



Financial Cost:

I believe that eating less meat is affordable.



Access:

I have access to plant-rich options.



Taste:

I believe that the taste of plant-rich options is acceptably good, compared to meat dishes.



Time:

I can make or find time for consuming more plant-rich options.

Ideating and prototyping interventions

The psycho-social states are reframed as opportunities for interventions. For example, “How might we affect the belief that those in my reference group are eating less meat?”

Guided by these opportunity framings, multidisciplinary teams do rapid sketching to generate intervention concepts for each psycho-social state. The initial concepts can be shared, examined through the lenses of multiple fields of expertise, and improved through interdisciplinary collaboration.

The strongest concepts that will yield the most learning are developed into prototypes to be tested with research participants. The participants are invited to respond to the ideas, and give their thoughts, feelings and ideas for improvement.

Conducting field research

For our research sessions sixteen people were recruited to participate in a ninety minute research session. They represented a range of ethnic backgrounds, income levels and regions of the United States. All were medium to heavy meat eaters who expressed some degree of concern about climate change.

Each session included an interview and an exercise to help the team understand the research participant’s beliefs and attitudes related to food and to climate change, both independently and in how they may intersect. Then the participant was shown the intervention concept prototypes and asked a series of questions: How likely would they be to engage with the concept, and why? What would make them more or less likely to engage? How would engaging with the concept affect other people’s opinions of them? What would they think of other people who engaged? For the most compelling concept, participants were to talk about the location and timing of the concept, to learn more about contexts where the intervention might be most effective.



What We Learned

The research confirmed what many on the team suspected: that considerations around food choice are numerous, complex, and densely interwoven. Primary consideration included taste, health and convenience, of course, but the list went on: appearance of the food, getting enough variety, feeling full physically (though not too full), feeling fulfilled emotionally, connecting with loved ones, feeling part of one's community, participating in one's traditions, and expressing one's personality.

Habit played a central role. What were people used to eating, procuring, preparing and enjoying with others? Changes in diet mean changes in the basic fabric of everyday life, and many people told us these changes were daunting, especially if introduced abruptly.

A consideration that was conspicuously absent was environmental impacts of food choice. When asked about it, nearly no participants were aware of any connection between food and climate change. Of the many reasons to choose a more plant-rich diet, environmental reasons were toward the bottom of the list, suggesting that they would be more valuable as reinforcers of already-adopted behaviors than motivators of new ones.

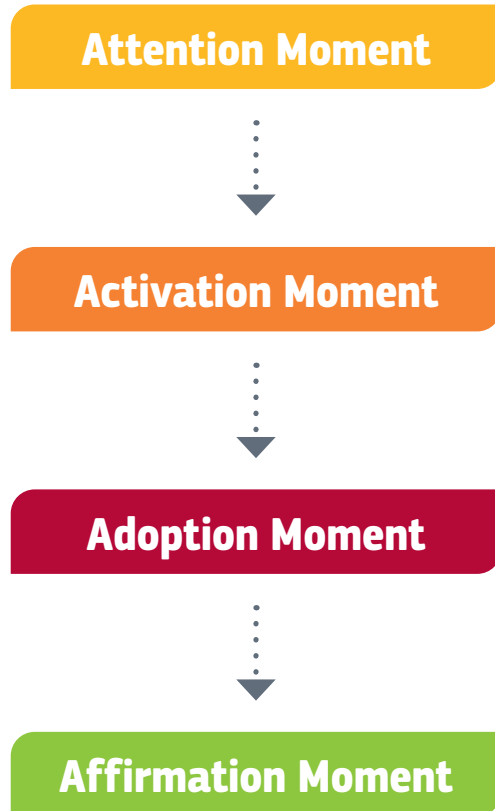
Consequently, the recommendations centered on making small, incremental changes in diet—changes that reassure people that they are not being asked to give up the familiar and pleasurable aspects of food—made for primarily health reasons, offered with social support from others who are further along in the behavior change journey. By making gradual changes that gently overcome practical, aesthetic and social obstacles, while also providing substantial benefits to health, people form new habits without disrupting their lives.

“My husband is very much a carnivore, so I don’t know that I could eliminate meat completely. Like, I could do it, and my son could do it, but my daughter and my husband have similar eating traits, and they like meat.”

– Polly

“Food for us has always been a very shared experience. Every night growing up was like me and him at the dinner table. Like my mom made dinner. And so yeah, I think he was kind of bummed [when I became a vegetarian].”

– Jackie



The Behavior Change Moments

The process of behavior change can be viewed as a journey, divided up into different moments. The person going through the journey, known as an actor, may experience only some of these moments.

Each moment of the journey represents a design challenge: giving the actor a reason to engage while also positively affecting their psycho-social state.

It's possible to engage the actor in the journey if they are willing to invest a certain amount of time, effort, money or social capital to get something of value in return: information, progress toward some goal, emotional gratification, a feeling of connection, etc. A successful intervention must meet these functional and emotional needs, while also shifting their psycho-social states.

Of course, these moments are only a small part of the actor's life, and they only influence behavior, not determine it. But the goal is to address the needs of the moment as effectively as possible in order to effect maximum change.

The challenge of each moment is summarized to help shape the design of interventions that support the goals of the moment.



Attention Moment

In the Attention moment, our actor becomes aware of the possibility of adopting a more plant-rich diet, and sees the possibility of adopting a more plant-rich diet as worth looking into, at least momentarily.

In this moment it is important to allow the actor to experience plant-rich foods first-hand, and to see that healthy, non-meat dishes look, smell and taste good.





Activation Moment

In the Activation moment, our actor takes tentative steps toward adopting a more plant-rich diet by trying a new dish and/or learning more about the what, how and why of plant-rich diets, and as a result decides to try out eating a more plant-rich diet.

In this moment it is important to support the actor in having some positive early experiences preparing and enjoying plant-rich foods.





Adoption Moment

In the Adoption moment, our actor commits to eating a more plant-rich diet, and begins integrating plant-rich foods into their life, gains knowledge, skills and habits around eating a plant-rich diet and experiences first-hand physical, aesthetic and ethical benefits from eating a plant-rich diet.

In this moment it is important to help the actor gain skills, establish new habits and see positive outcomes.





Affirmation Moment

In the Affirmation moment, our actor signals approval of plant-rich diets to their reference network, both by sharing the fact that they are eating more plant-rich foods and sharing information supportive of plant-rich foods, so that their reference network begins to see eating a more plant-rich diet as admirable and normal.

In this moment it is important to help the actor feel informed and confident, so they will share their experiences and insights in a way that is likely to be received well.

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Developing Interventions and Journeys

Guided by the insights from the research, the behavior change interventions are revisited. Intervention concepts that test well are retained or used to inspire improved versions. Often, the research inspires new intervention concepts that address considerations learned in interviews.

The new set of interventions is sequenced across the four behavior change moments, and then connected together and developed into a continuous designed experience, expressed as a story from the future.

Of course, when the interventions are developed, released and experienced by real people, each experience will be different. They might experience only some of the interventions, and they might experience them in a slightly different order. The story from the future is intended to illustrate an ideal typical experience where an actor interacts with all the interventions, to make it easier to understand how the interacting with the interventions across the moments comes together as a single experience.



“For the most part, people aren’t looking to eat a plant-rich diet and figuring out how they’ll make it work. They’re looking to eat healthier, tasty food, fit in with their peers, keep food from being a hassle, etc. This journey is crafted with the understanding that eating less meat was simply a means to an end, and that a transition only happens if it relied on steps that asked for little additional effort before receiving some additional motivation to keep at it.”

– **Natalia Paine**

Food Marketing Manager, Rare’s US Climate Change program



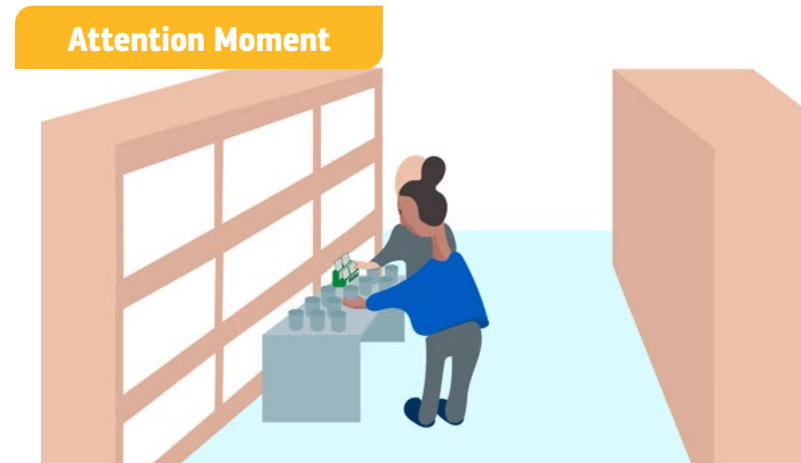
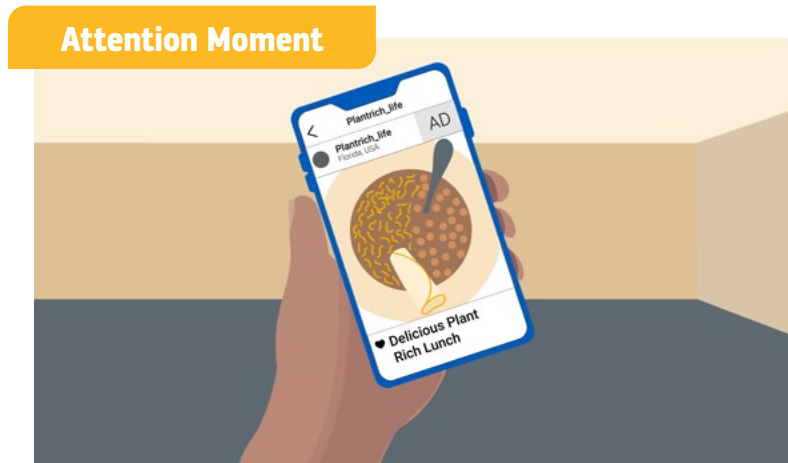
A VISION FOR THE FUTURE

A journey of adopting a plant-rich diet.

To bring about behavior change, it ultimately has to work in the context of people's lives. Therefore, it's useful to imagine what these moments and psycho-social shifts look like from the perspective of an actor.

The following pages envision such a "story from the future." The journey follows our actor, Taylor, as she moves through each of the behavior change moments. At each step, she becomes more committed to adopting a plant-rich diet and to help others to learn about the benefits of eating more plant-based foods.

Individual Journey



Taylor scrolls through her social media. She sees images of people eating healthier than her. She starts noticing ads about how tasty and healthy plant-rich foods can be.

She sees a sample table at her grocery store. It looks like a great opportunity to see if some of these foods are as tasty as they look.

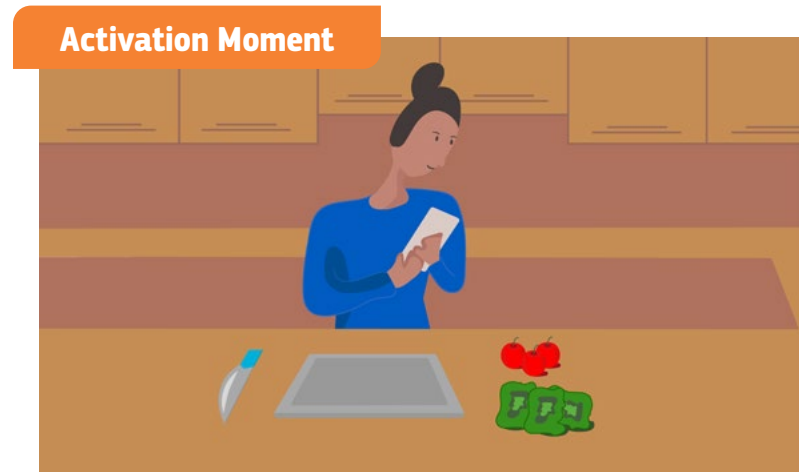
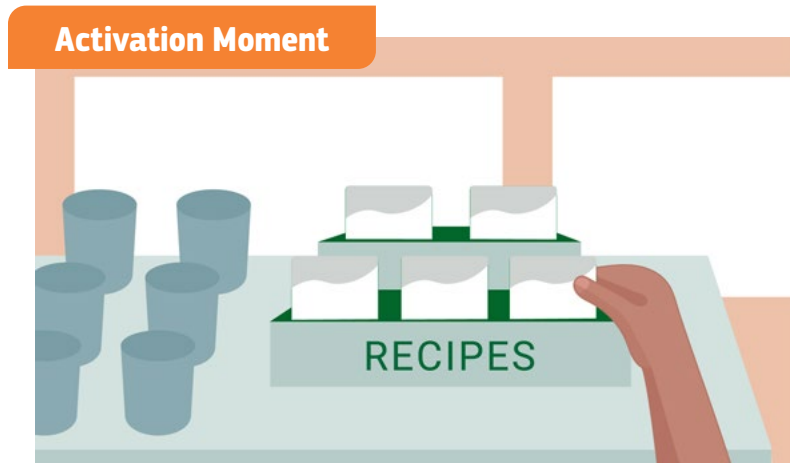


Psycho-social states: Taste, Health



Psycho-social states: Taste, Health

Individual Journey



Taylor tastes the sample at the grocery store table. She picks up a coupon and a recipe for the food she's trying.

Taylor tries cooking the recipe. It turns out well.



Psycho-social state: Taste



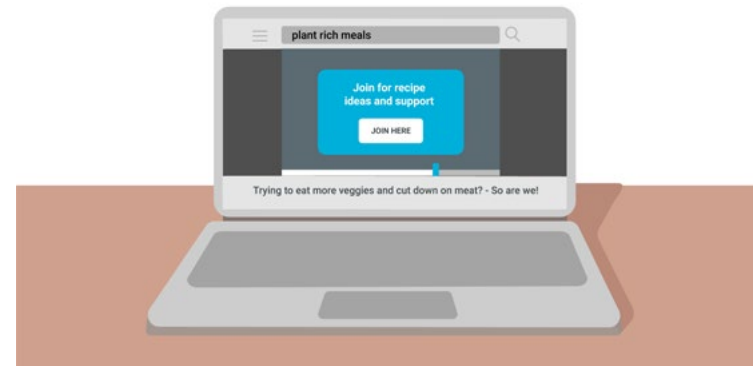
Psycho-social state: Taste

Individual Journey

Activation Moment



Adoption Moment



Taylor sees more digital content extolling the health advantages and taste of plant-rich foods. She now sees plant-rich foods as something she might want to explore, so she clicks on one which directs her to Rare's landing page.



Psycho-social state: Taste

Taylor explores Rare landing page, views the cook-along video, and joins a Rare online group. She reads online group content. Most of it is how-to content. Some of it is about health. A little of it addresses the environmental benefits of eating a plant-based diet. Taylor feels even better about her decision to eat more plant-rich foods.



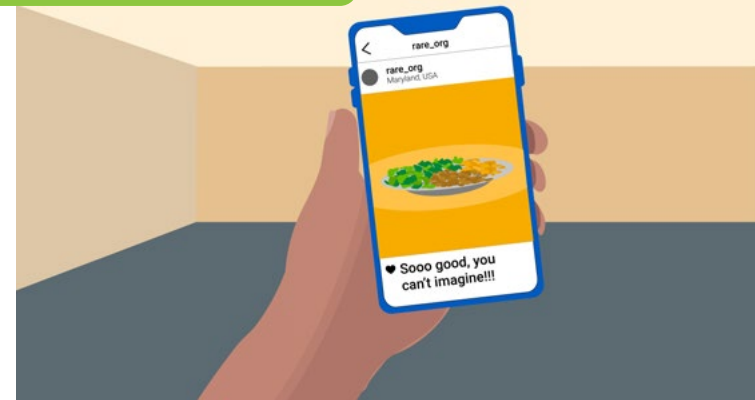
Psycho-social states: Empirical Expectations, Health, Normative Expectations, Action Knowledge, Financial Cost, Access, Taste, Time

Individual Journey

Adoption Moment



Affirmation Moment



Taylor sees coupons for plant rich products and recipes in her weekly grocery store bulletin. She asks members in the online group for support on maintaining her plant-rich diet—on how to use a specific product / recipe didn't work.

Rare shares a recipe of the week on the online group. Taylor decides to try it after reading some of the tips that people are sharing.



Psycho-social states: Empirical Expectations, Health, Normative Expectations, Action Knowledge, Financial Cost, Access, Taste, Time



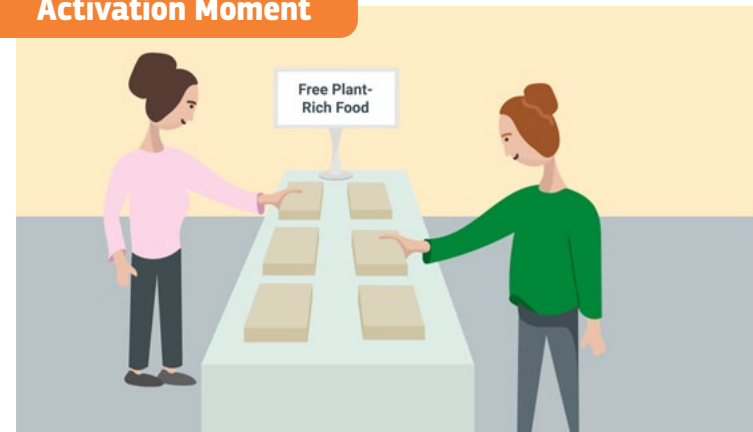
Psycho-social state: Normative Expectations

Employee Journey

Attention Moment



Activation Moment



Sylvilla receives an email from her employer about Green Benefits. She learns that her company is hosting a food fair tasting event for healthy plant-rich can try meat-free dishes.

When Sylvilla notices a free plant-rich lunch being offered, she tries it out. It tastes great and leaves her feeling just full enough.



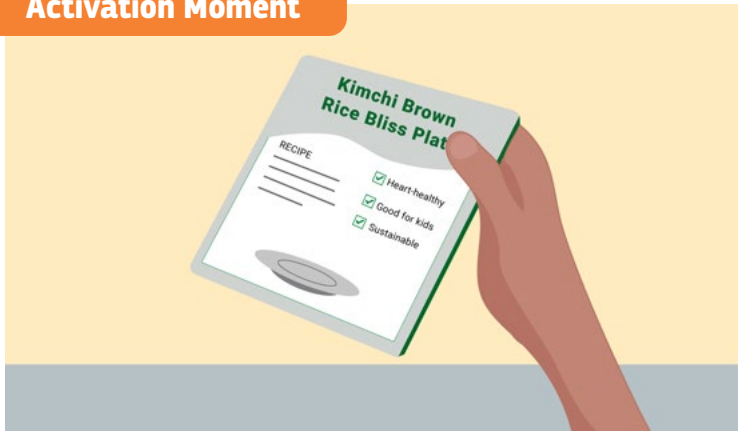
Psycho-social states: Health, Taste



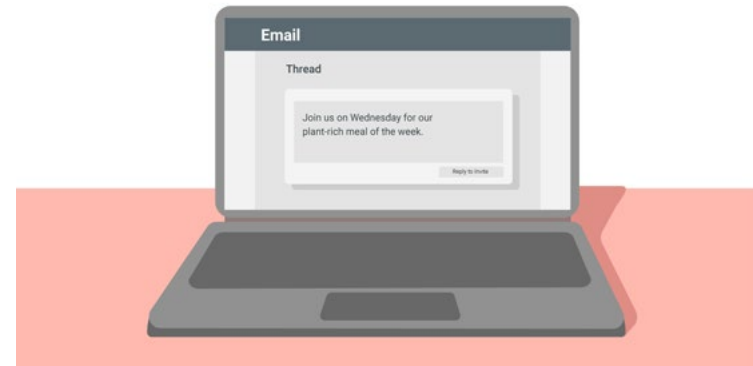
Psycho-social state: Taste

Employee Journey

Activation Moment



Adoption Moment



She takes a recipe card home. It also contains nutritional and cost info (and QR code with video of preparation). She sees emails related to the program and skims them occasionally. She gets the impression that plant-rich meals are good for you and good for the planet.



Psycho-social state: Taste

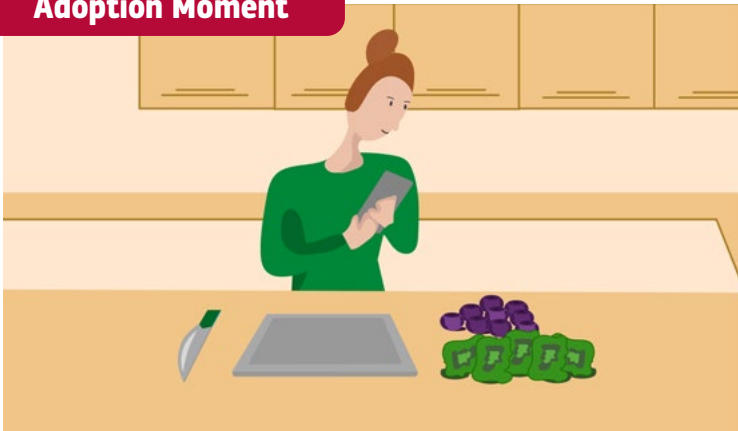
Sylvilla starts reading the emails and eating the meals when they are offered.



Psycho-social states: Empirical Expectations, Health, Normative Expectations, Action Knowledge, Financial Cost, Access, Taste, Time

Employee Journey

Adoption Moment



Adoption Moment



She decides to put some of the meals she likes into regular rotation at home.

Sylvilla gets involved with a plant-rich affinity group at work.



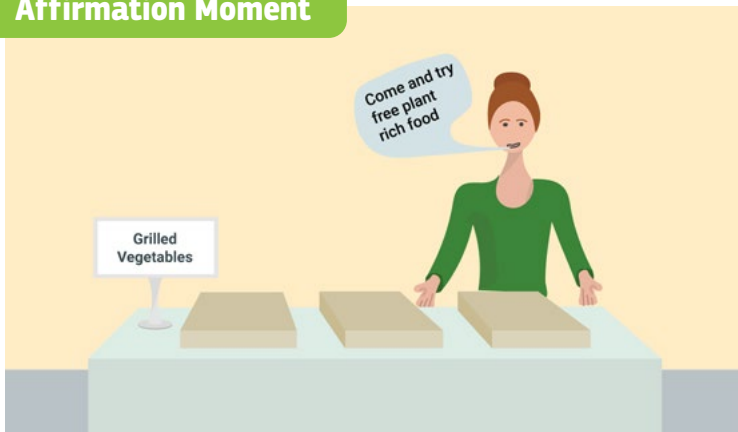
Psycho-social states: Empirical Expectations, Health, Normative Expectations, Action Knowledge, Financial Cost, Access, Taste, Time



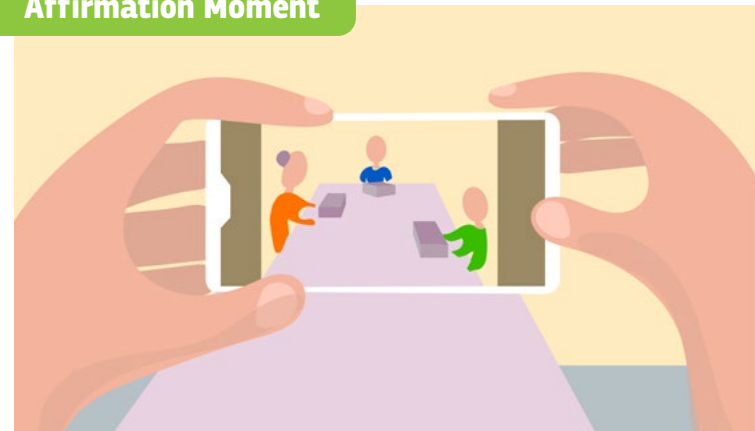
Psycho-social states: Empirical Expectations, Health, Normative Expectations, Action Knowledge, Financial Cost, Access, Taste, Time

Employee Journey

Affirmation Moment



Affirmation Moment



Sylvilla makes a commitment to help serve her fellow employees by ordering catering of healthy and environmentally friendly meals for a celebratory occasion. She acts as an ambassador by sharing her experiences with her team.

Sylvilla takes a picture of her team enjoying the meal.



Psycho-social state: Normative Expectations



Psycho-social state: Normative Expectations



Blueprinting the Journey

A key part of the process of developing the sequenced interventions into a story from the future is blueprinting the experience delivery. This method is adapted from one of the core tools of service design, service blueprinting.

In the experience delivery blueprint, the question is asked: how, concretely, will this experience be actualized, both frontstage, where things are experienced directly by the main actor (whose behavior we wish to change), and backstage where the experience is supported behind the scenes.

The frontstage of the experience includes touchpoints encountered by and interacted with the main actor, as well as other people who interact with the actor and help shape the experience.

The backstage includes all the actions, processes, policies, technologies, etc. that support the experience behind the scenes.

Creating an experience delivery blueprint places the story under a microscope and allows the team to think carefully about the practicalities of the experience. How likely is it to work as intended? And what organizational capabilities are required to make the experience happen as envisioned.

What's Next?

The behavior change journey is now in its first iteration. The capabilities identified in the experience delivery blueprints are being mapped to existing solutions, developed to bring about change. And so most importantly, Rare is interested in connecting with people and organizations who see themselves as part of the solution to bring about behavior change.



Drop us a note at
mip@rare.org



Follow and message
us on social media at
@rare_org

LET'S CONNECT

These are just some of the reasons to connect with us.

- You see your capabilities and solutions as a part of the journey
- You're already working in this space and want to bring behavior change design to your work
- You have some questions or feedback on this book
- You want to get involved or just follow along



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Rare inspires change so people and nature thrive.

Rare is an international non-profit organization specializing in social change for people and the planet. With a people-centered approach rooted in behavioral science and design thinking, Rare has inspired and empowered millions of people in over 60 countries around the world to shift their behaviors and practices so both people and nature thrive. Now, Rare seeks to inspire people to take actions that have the greatest potential for measurably moving the meter on climate change right now.

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