



noon

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noon context

WHY?

WORKING FROM HOME IN 2036



Working from home (WFH), also called telecommuting or telework is becoming increasingly common as a global trend. Specifically in the United States of America, the percentage of employees working from home is growing between 11% and 20% per year, representing over 20 million employees in 2015 (Nakrošiene, A., Bučieniene,

I., & Goštautaitė, B., 2019). At the same time, the spectrum of jobs that home-based workers can choose from is now wider than ever, ranging from sales assistance and realtors to managers and software engineers (Bloom, N., Liang, J., Roberts, J., & Ying, Z. J., 2015).

As benefits for employees to work from home includes that overall employees are happier working from home than in the office; massive improvement in performance (Bloom, N., Liang, J., Roberts, J., & Ying, Z. J., 2015); having less stress of traveling in peak traffic, and the flexibility brought by this new way of working (Wiesenfeld, B. M., Raghuram, S., & Garud, R., 2001); it's predicted that in the future, the trend of working from home will keep growing.

On the other side, critical issues included challenging communications between employees and employees and employees to manager (Gajendran, R. S., & Harrison, D. A., 2006); mental and health issues raised due to prolonged hours staying at home (Wen, L. M., Kite, J., & Rissel, C., 2010), and the difficulty combining family and working life (De Graaff, T., & Rietveld, P., 2007).



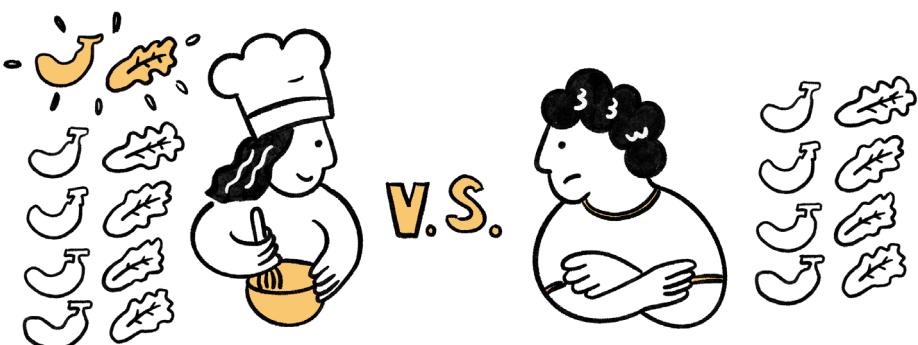
IMPORTANCE OF FAMILY GATHERING

Although, working from home was perceived to have the benefits of giving people the opportunity of spending more time with their families. However, on the contrary, due to the undefined working hours and an unclear difference of space has led to work getting spilled over all pockets of free time, including the brief periods when family gathers together.

Meal-time, when observed with a family, is at best, meant to be a form of "mutually agreed upon distraction", oftentimes from hectic work routine. However, with the intrusion of technology like mobile devices, that assure

rather private forms of entertainment, have begun to break the strong bonds built around family meal-time, by being a source of "personalised forms of distraction" (Ferdous, 2015).

Dining together, for a family has always been considered as an auspicious as well as a culturally significant moment. Often, it serves as an essential ritual for the initiation of a child into the life of a society. While, almost always, the family meal is an occasion where thoughts of deep personal importance are engaged and pondered upon, in a mutually protected and private setting (Bossard, 1943).



Just as a television is to a family living room, a meal is to a family dining table. Thus, partaking of a meal together with your family, becomes a shared experience of substantial value for the conversation to happen. (Ferdous, et al, 2016)

A study conducted by the Department of Public Health Sciences, School of Public Health, University of Alberta, Edmonton, Alberta, Canada, found that Higher frequency of involvement

in home meal preparation was associated with higher diet quality Index. Children who were involved in meal preparation daily ate 1 more serving/d of vegetables and fruit compared with children who never helped. Thus, children who were more involved in home meal preparation also consumed healthier diets. Encouraging parents to involve their children in meal preparation could be a viable health promotion strategy. (Chu, Storey, Veugelers, 2014)

SCENARIO

A life online



It's Wednesday morning, I wake up and notice that I forgot to put my VR headset on charging. Not a good start of the day. I quickly plug it in, but it will take at least an hour to be fully charged. I take this opportunity to cook some pancakes for my kids, it has been very long since I last cooked for them. They come out of their rooms, grab a pancake each, while still browsing their social media feed and without uttering a word, return to their rooms, leaving me at the table alone, while I finish mine. After that, I go back to my room to switch on my headset which is finally charged. I logged into the work room and started working.

At 2:30 in the afternoon I finally go to the kitchen to have lunch that just got delivered from Nutri-max; Alex, my son, is there, heating his packet in the microwave.

I'm so happy that we can have lunch together. In the last month we haven't spoken a lot, but my friend Denise told me it's normal at his age. After all, he's just 15. I sit joyfully at the table but he quietly takes the food from the microwave and without saying a word, goes back to his room with his food. I'm not even sure that he saw me. Before going back to work I go to Nora's room to see how she's doing and I notice she's not there. I look on my "Mommie's watching" app to check where she is. She's at the Granola Gambit close to the Santa Monica pier, probably just there with some friends. I have to go back to work, I'm already late! I had thought that working out of my home would let me spend more time with the kids. I wish if in some way we could all just sit and have a small chat during anytime of the day.

In the evening after a long working day, I had ordered some fettuccine Alfredo, Nora really loves them. While the dinner is heating I go to call my husband but he's still working. So I knock on Nora's door, she hates when I don't knock, but she's still out. I'm very disappointed, So I go back to the living room to tell my son that dinner is ready but he says to me, a little embarrassed, that he didn't know I've already ordered something so he ordered some other food for him, the drone is arriving. So I sit down to have dinner alone, putting on my VR set to browse through some videos my personal assistance have chosen for me. By 9pm, Nora had returned. I suggest to her maybe we can have a family movie night watching Toy Story 9 this coming Friday, "No, I've already watched it with Sophie." Nora replies. "Okay.. have you had din..?" Before I even finished asking, Nora walked back to her own room and closed the door.



PERSONA

Let's meet Sarah



Sarah is 35 years old. She is a mother of two children - Nora and Alex. She is working full time as a tax agent, and has been working from home since 5 years ago. Her husband, Rob who is a developer, has also been working from home for 7 years; Both Nora and Alex attend most of their classes online. Although most of the time the family are under the same roof, they are more connected to their personal device and barely talk to each other.

Sarah loves trying out new cuisine a lot, however, she finds cooking food and cleaning up very time consuming, so her family has been mainly ordering delivery food which they found convenient and hassle free. As of different food preferences, the family often order their meals separately. Even during the weekend, Sarah rather spends her time on taking some rest by either watching cooking videos or online shopping on her VR device.

Sarah cares about Nora and Alex a lot, and she wishes to spend more valuable time with them more often. However, Nora and Alex mostly lock themselves in their own room, and rarely share anything with Sarah. Sarah tried to suggest a family movie night on every Friday, but Nora and Alex said it was boring and were not willing to participate in this family event.

NEEDS

Spending more time with her family, especially with her two children

Wasting less time on preparing and cleaning to invest more time to actually cook

FRUSTRATIONS

Not sure what activities can the family perform together

CLIMATE CHANGE IN CALIFORNIA

It's needless yet prudent to continually remark that climate change shall have lasting and majorly irreparable effects on the work and life of the Californian population. An eminent rise in annual average temperature, long periods of drought, extended wildfire sessions and scores of climatic irregularities are bound to reshape every aspect of human life in this region, just as elsewhere. (A. L. Westerling & B. P. Bryant., 2008)

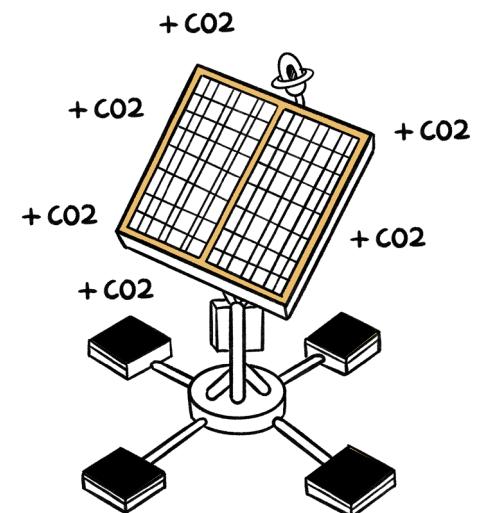
Even minor changes in annual weather cycles tend to have an enormous and often an irreversible impact on almost all essential aspects of the social sphere such as cropping patterns, changes in need of certain agricultural and manufactured products, working conditions and even the public's attitude towards the outdoors and social life. Humans have always moulded their social framework to adapt to geological changes in a quest for survival. Amongst other things, this might translate into a substantial

reformation in work patterns and culture. (James M. et.al, 2003) However, with this ever evolving climate situation, arise several opportunities for providing solutions at a local level and especially at the segment of the family space. Since, the individual and the family nucleus shall present the first frontier for social changes to happen, it is imperative that comprehensive and systemic solutions be provided to this segment so as to help them adapt better in this scenario. One of the greatest changes a family is bound to undergo with the introduction of remote work is the evolving landscape of interpersonal interaction amongst its constituents. With the infusion of technology and personalised forms of entertainment, family interactions will experience an inevitable strain. Thus, even a simple ritual like a family lunch shall redefine itself over time. And this presents a ripe opportunity for a service infrastructure to fill in.

One advantage of increasing temperatures is longer periods of sunlight, that comes in lieu of the fact that this would greatly disrupt the nature and form of food supply as well. A lot of food will be aggregated and manufactured to meet the needs of this time. Thus a well-cra-

ted service system that combines the factors of processed food and increased sunlight along with on-demand supply of prepared food with a product intervention that makes good use of available energy from sunlight, makes complete sense and spend time together while the food obtaining heat from the sun.

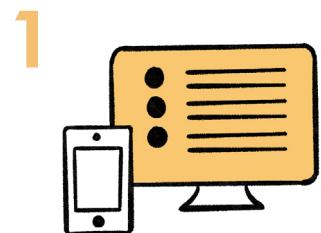
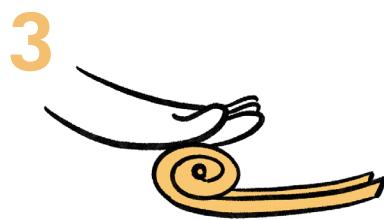
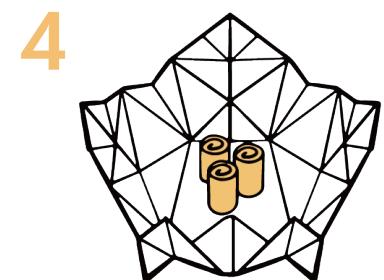
This is precisely the niche that our product service system seeks to occupy. The noon provides a home delivery of prepared, processed and nutrient rich food to working households, in a packaging that not only doubles up as a product that ensures customer engagement but also as a solar oven.





noon product

HOW?

**Order****Receive****Prepare****Heat****Enjoy****Recycle**

INTRODUCTION

The product and service

Imagine it's finally Sunday, you wake up late in the morning, opening the curtains to let the warm sun into the room.

You and your family haven't been together for a while, however, no one knows what to do, watching a movie together seems boring, besides it wouldn't allow you to make the most of this beautiful day, cooking together either then there will be a mess to clean up and it's useless to waste this precious time with household chores.

Suddenly you remember a friend who told you that she had a great time with her family using a service called noon.

The service attached to the product is based on the theme: family time, anywhere, anytime. It is noon a hassle-free service that helps you leave out all the clutter but keep all the fun when preparing food with your family.

It is also an "excuse" to get the family together, forget about work for a short while and have a meal that nourishes both mind and body, with your loved ones.

What's more, it can be taken or ordered anywhere, allowing us to spend wonderful times together in our favourite places, enjoying healthy outdoor time.

THE PRODUCT

The product is noon is a delivery box that can be ordered via any popular food delivery service and brought with you to your garden, to the beach, to a park, or anywhere you would like to spend some time with your family or friends, noon contains everything that is needed to enjoy a meal out in the sun. The smart design of noon enables multiple functions to the delivery box, which not only enables you to bring along your food but also to prepare the individual dishes right on location, heat it up in the foldable solar cooker, and gather again around the cooker to eat directly from noon. The clever folding mechanism of the product makes it possible to switch between these three functions.

The box can carry enough food for a family of 4 people. It can either be ordered and delivered directly to your location, while it is also small enough to easily take it with you on the bike or car.

Placed into the direct sunlight in California it will only take a few minutes for food placed on the heating pad to get warm.

When folded to a flat surface, noon is both a dining and preparation station. There is enough space to prepare your individual pieces. As the different pieces of plant-based food is attached directly to the walls, it is always in reach while preparing your sandwiches. Once the food is heated the same surface area can be used as the dining station where you can enjoy your personal heated sandwich all together.



PACKAGING

Safe for the food

Easy to carry

Impact resistant

For 4 people

SOLAR OVEN

Easy to assemble

Easy to use

Quick cooking

Safe for users and food

DINING STATION

Practical to use

Allows eating anywhere

Safe for the food

Easy to use by 4 people at the same time

THE PACKAGING

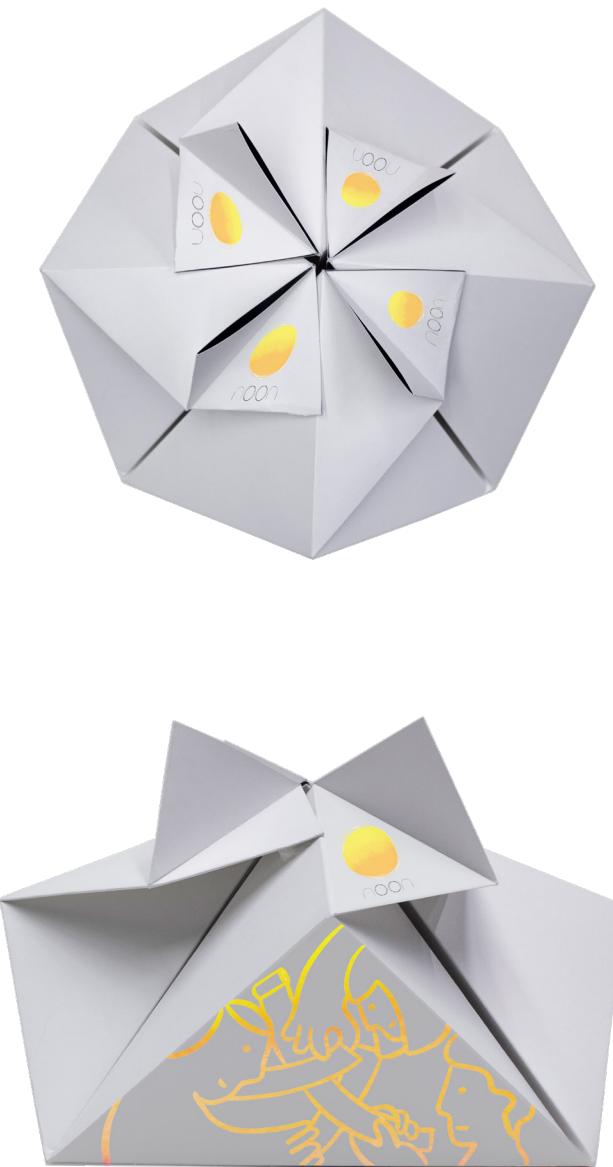
Paper is the protagonist of this product story. In fact, excluding Velcro to make its multifunctionality effective, noon is completely made of paper. The packaging is available in two sizes: small (containing 4 portions) and large (containing 8 portions). The small size product consists of a 70x70 cm double-sided sheet which will be folded into an easy to carry food package, due to its geometry, does not deform easily during delivery. The large size will have the same characteristics, but with a matt size of 100x100 centimetres.

The outer side of the box is characterised by a matt white paper with elegant graphics that narrate a story emphasising on togetherness and fun at meal time. The surface is coated with an EPA approved food grade cellophane film to make the material less absorbent and more resistant to substances that may come into contact with it. In fact, designed for use in the open air, noon is not afraid of being put on the ground, but guarantees its functionality in every outdoor context.

The inner surface, on the other hand, is reflective so that the packaging can be used as a solar oven, but also for optimum food storage, as in conventional food packaging.

The production process is very easy: just crease and fold the material with the predefined marks, place the velcro in the appropriate spaces and then the packaging is ready to be used. Once filled, the person in charge will close and seal the product, ensuring a fast and safe delivery. The ink used in the box is REVALUX 164 which is food safe and certified by Food and Drug Administration (FDA) for use on the packaging.

As well as efficiency and ease of production, noon also addresses user experience, in fact it is designed to make the unwrapping, a spectacular and easy moment! Once the flaps have been opened, which guarantee the safety and wholesomeness of the food, the box will open automatically thanks to the arrangement of the food on the side plates, making the moment magical, almost a sort of revelation.





THE ADVANTAGE

Solar Oven

One of the most characteristic functions of noon, and one that makes it quite different from all other food packaging, is the fact that it is also a solar oven. This might seem a significant departure from a delivery box, but noon has made it an easy and extremely quick step.

Once you have prepared your roll, you place the food rolls in the centre so that you have a firm horizontal base on which to place it, then simply bring the sides together with Velcro, on pre-marked points, so that they are joined, the step must be done on the 4 sides of the box and the transformation is complete.

Thanks to the reflective surfacing and the shape specially designed to increase the concentration of reflected sunlight, the food will be heated in no time!

The result can vary depending on the weather conditions, for example, a clear sunny day will allow a very low waiting time.

While the food heats up you have the opportunity to spend time with friends without having to worry too much about the food.

The real revolution brought by this service is the complete autonomy of the final process of food preparation, in fact you do not have to constantly check the food for fear of burning it, with the solar oven you always have the desired results without much effort. Once finished, simply peel off the sides with Velcro, fold the product and place it in the appropriate bin, thus making noon completely recyclable.

THE UTILITY

Dining and preparation station

The value of noon is that it is a multifunctional product. Its first purpose is food packaging. In fact it allows food to be transported in an optimal way, avoiding waste and eliminating additional factors that would only have value in the delivery phase.

The service is environmentally friendly, avoiding waste both for the box and the food it contains, which can be easily taken out of the box and stored, to minimise waste. The box not only contains the food, to be consumed by the customer, but also offers a convenient surface to prepare it.

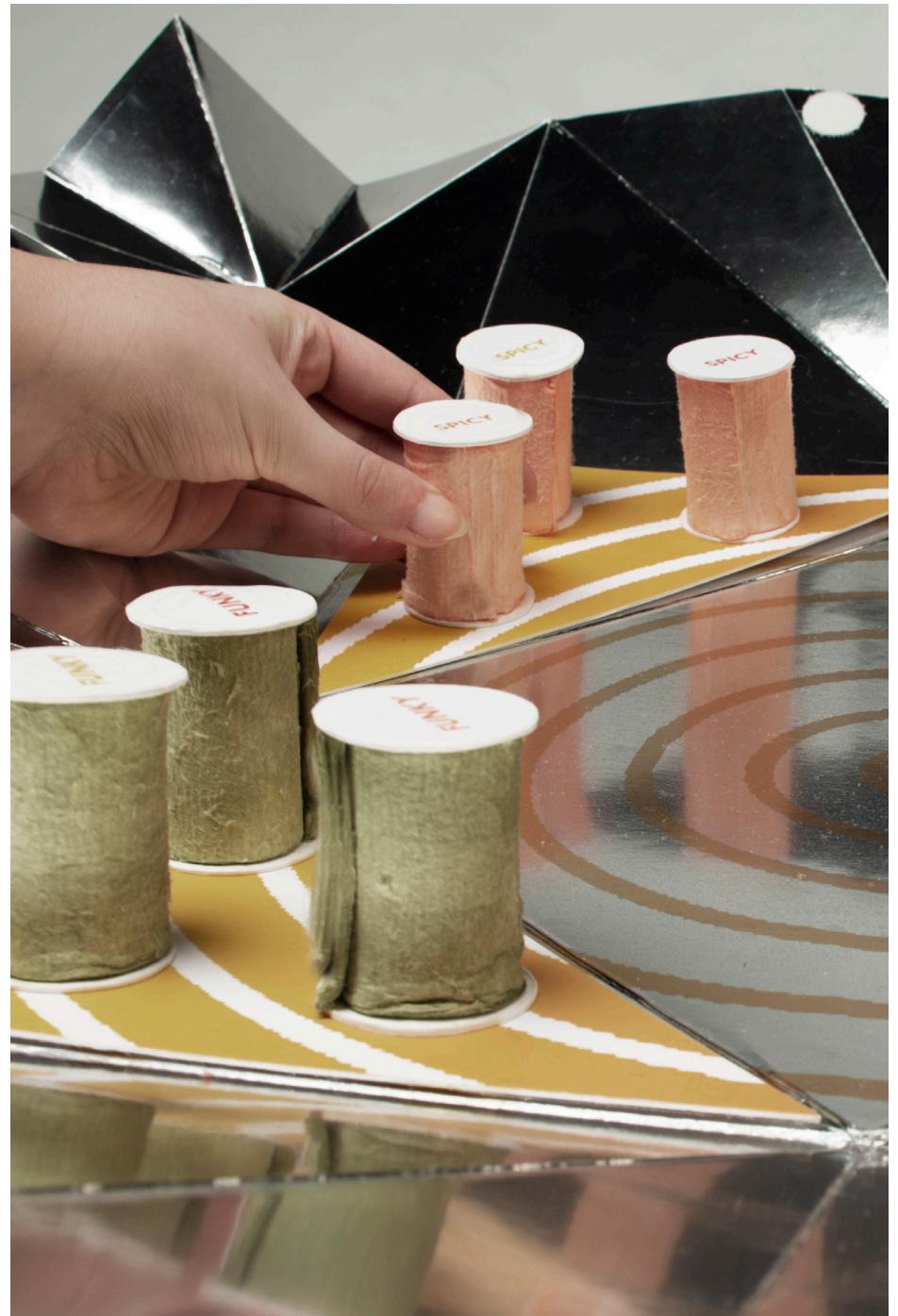
One of the fundamental characteristics of noon is that it encourages interaction between people, as the food is not entirely ready to be consumed, but is proposed to be broken down and assembled and it will be up to the consumers to compose it, following their tastes and preferences.

This simple process allows the members of the customer group to relate to each other and acts as a conversation starter.

The decision to make the food customisable is also a response to people's increasing need to have it tailored to their varying taste palette.

The process of creating one's own food is easy, inside the box are spools where plant based meat will be arranged in strips rolled up on themselves, the user will choose their ingredients, arrange them like a spiral and have their meal ready.

Once this step is completed, you will discover noon's additional function: you will be able to use it to heat up your roll and enjoy it in the company of others, enjoying moments of disconnection.





THE CULINARY OFFERING

The food is the cornerstone of the entire service, noon wants to offer its customers a unique experience that differentiates its proposal from others on the market. The attention to the environment is not only connected to the choices for the packaging and the solutions proposed to the customer, but also in the type of food offered.

The idea behind noon is to recreate the nostalgic moment of the barbecue, where people gather and spend time together, cooking and having fun. The next goal was to make this moment easier and faster for people and update it to modern times. In fact, intensive deforestation for maintaining pasture lands for livestock and production of meat is one of the major causes of climate change, so a more conscious and limited consumption of meat becomes an increasingly urgent need that cannot be overlooked.

For these reasons noon proposes a solution: plant based meat, tasty yet environmentally friendly. This is the main food of our menu, but obviously the offer is enriched with other foods

that help to satisfy the most demanding customers, in fact vegetables, sauces and bread will help compose your perfect lunch. Seen in this way it all seems normal, but the unique experience that is offered to the customer is to experience these flavors in another form, wherein, all foods are presented in the form of strips. The ingredients come from farms trusted for good quality and organic produce to ensure a very high quality of the food offered. The raw materials are then processed in the laboratory, turning them into strips, ready to be rolled.

These foods will be produced with a colorful texture, this choice has two reasons: the first is to make the products attractive, also with the use of natural dyes such as chlorophyll and spirulina algae allow to further enrich the nutritional value of the food. The non-uniform effect then is due to the use of spices and seasonings, which will exalt the taste of products and make them ready to use. These foods can then be combined and mixed by the user for new and memorable taste experiences.



noon service

HOW?

THE SERVICE

The semi-prepared noon box will be delivered to your location (and if the sun is out, it's even better). It can be ordered through our online platform, which will also suggest to you the best time of the week or a good sunny day, to enjoy your meal at its best. When ordering, you can choose from our various packages and set your preferences.

What we offer to you is a carefully and tastefully curated palette of ingredients, prepared by some of the well known chefs of the region, as they bring their award winning recipes to your table. Our service makes it so easy for you to prepare that, we guarantee, you will have a great time enjoying it with your loved ones.

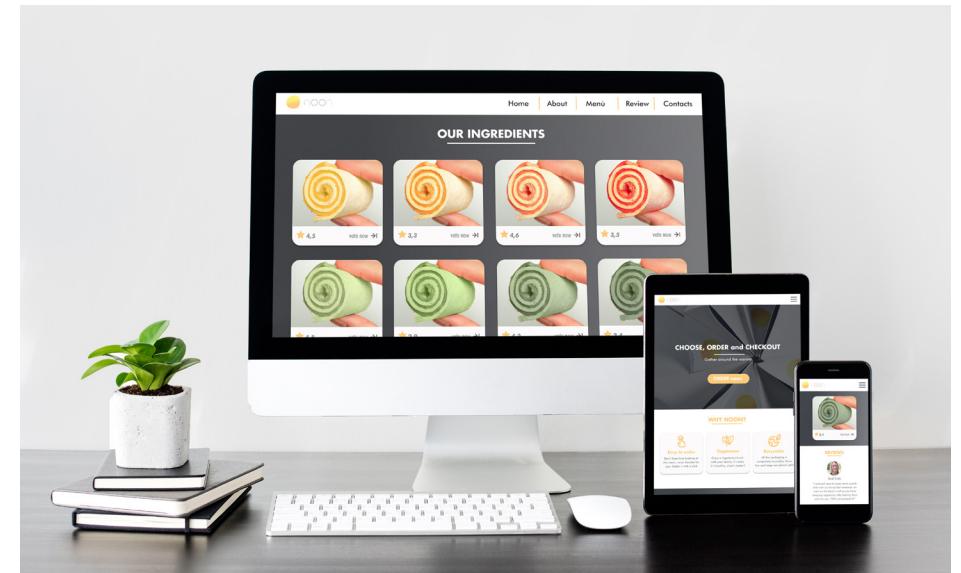
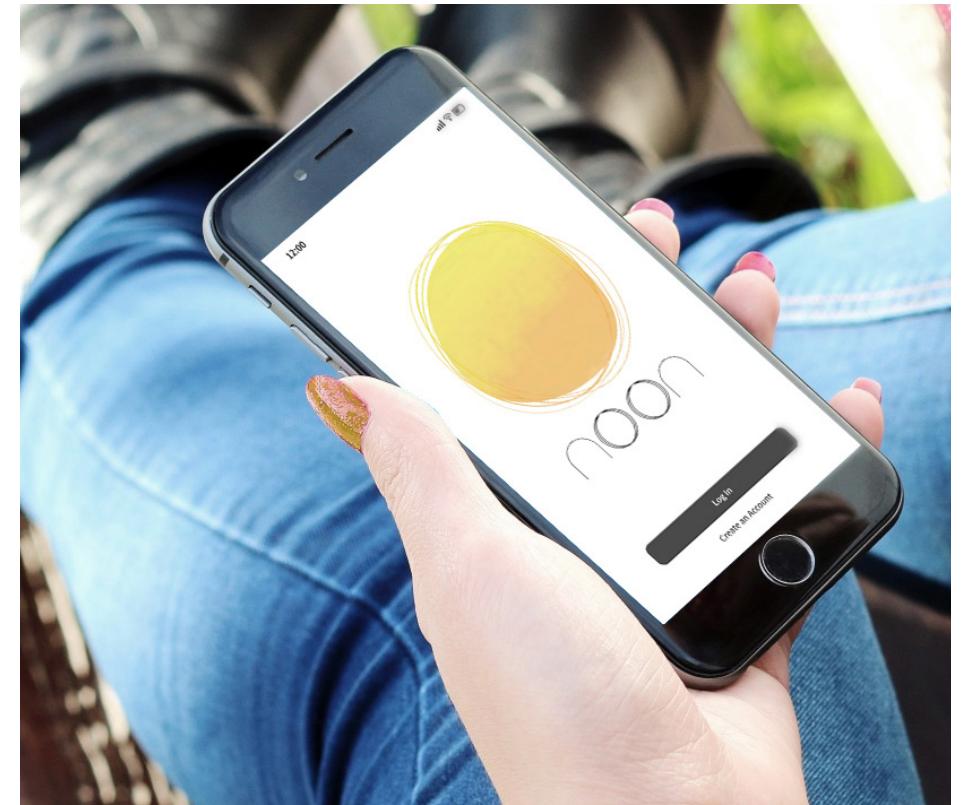
The food that we bring to you is sourced from trusted local farms practicing sustainable, organic and pesticide free agriculture, while all meat products are sourced from biological, protein-rich sources such as peas, cocoa, coconut, rice and apple.

Seriously, no animals were ever harmed in the making of your delicious meals.

Our ingredients are delivered to you in the form of strips of meats and vegetables along with a succulent collection of sauces and spices. While the packaging can easily be converted into a solar oven, just in case you find that your food is not as warm as the sun outside.

We endeavour to improve our service offerings and the menu in a more personalised way with consecutive orders. Hence we have included a mode of feedback in our package via which, a customer can reach our online portal and rate each of the flavours provided to them in every package. The user can also notify us regarding any special preferences both while ordering our service and for future orders.

Our service will also provide indications for the best time to use our product via a calendar and personalised notifications to our subscribers.





MENU'

Our service works with the best chefs in the region, with expertise in some of the most well known and well liked cuisines. Thus we curate decadent palettes for you with the choicest assortment of recipes, straight from the masters and bring a fresh and exciting menu for you every week. Inside the box, we provide you with 12 different ingredients in the form of strips. When you open them, you will find them in the form of 12 rolls labelled under 4 flavour profiles: sweet, sour, spicy and funky, with three different intensity levels.

SHARE IT

You can try all the flavour profiles yourself or, together with your family, you can make many different combinations according to your taste. Our choice of ingredients allows you to create your own tasting menu every week. You can also rate each of the flavour profiles you receive each week on a flavour chart that you can access via a barcode on the "thank you card" accompanying the box. Your evaluations will help us to provide you with a better flavour according to your preferences.



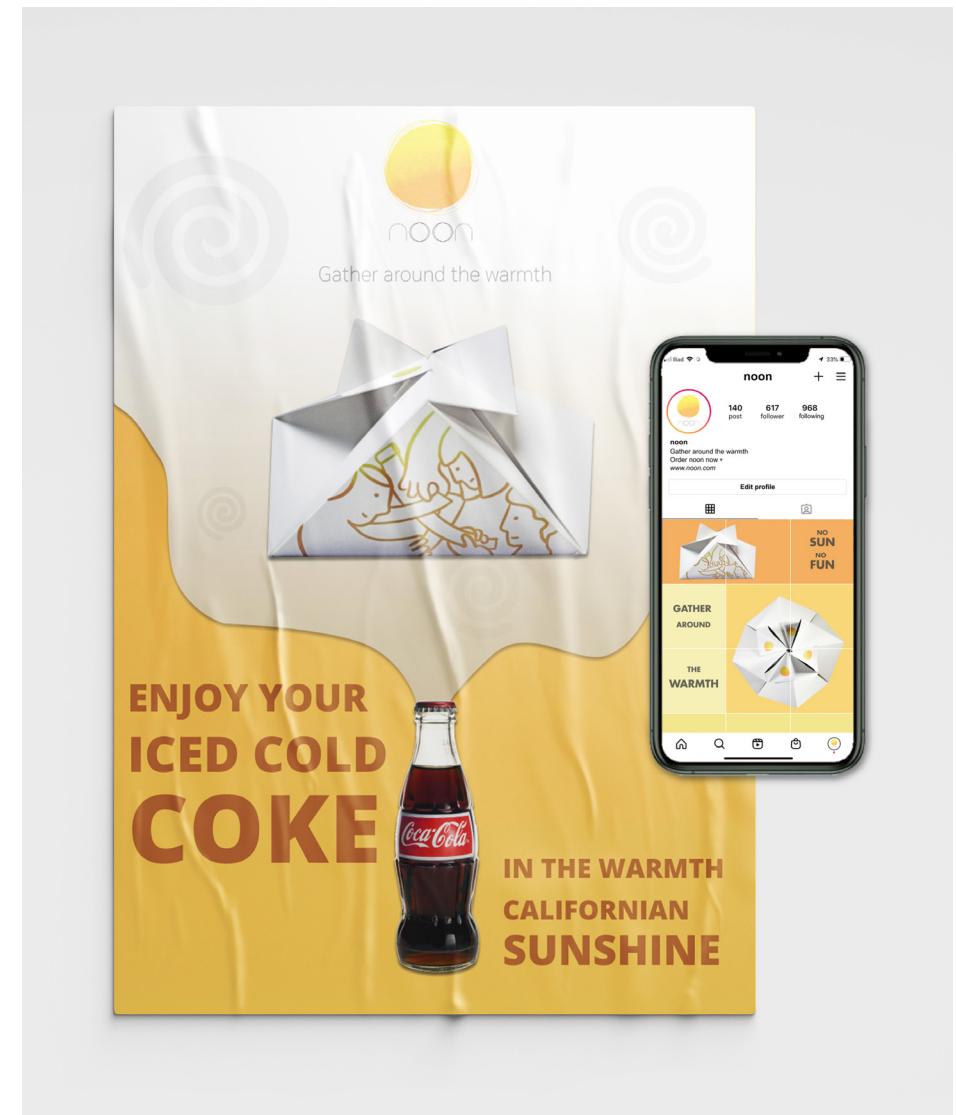
ADVERTISING

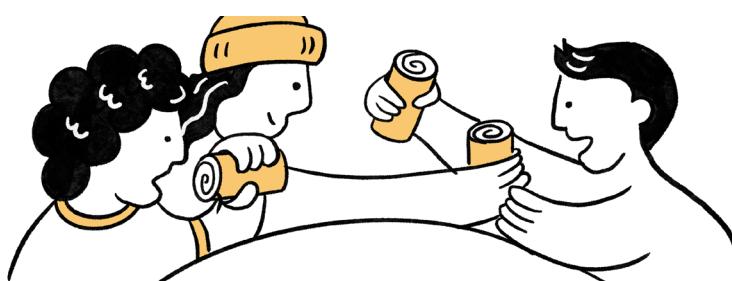
Since our service promotes the atmosphere of festivity and celebration around food, coupled with an effort towards gathering people, the primary mode of advertisement for initial market penetration could be via the association of this service with popular beverage and snack brands which enjoy a greater trust not only in food but also in entertainment segment. Beverage brands like Coca Cola, Dr. Pepper etc can help propel the infusion of our brand into the market.

For promotion, samples of this food package can be sent to Sunday brunches at local charter schools and unions in the region. Since Sunday brunches at district and county schools are an important feature of neighborhood community in California where parents and local residents often hold potluck buffets, inclusion of this food delivery can be a welcome change.

Further, this food can act as an effective snack item for outdoor parties. Thus advertisements showing this box alongside salads and traditional picnic buffets and fares can be an effective method for its publicity and brand optics.

Furthermore, to make our advertising even more effective, there will be posters and dedicated social pages: in order to respect our goal of disconnecting people from the digital world, this latter method will simply serve to reach customers, but will discourage the use of the same channels during the experience.





THE TARGET MARKET

The service is largely for any food enthusiast who wants to experience gourmet recipes in a novel way. But particularly it is aimed at working households, i.e., families and/or groups of friends who feel the need to reconnect and rejuvenate their interaction over food. This target audience is mostly a part of the new work culture wherein digital communication reigns high and people are in great need of a technological detox. Our method of delivery is via packaging which ensures that people partake in a hearty and healthy meal, while enjoying the company of their loved ones, by design.

The taste palette provided in the box, in the form of 12 different rolls, encourages people to share and build their own morsels, combining and experimenting with the ingredients in a playful way.

This helps improve interaction between the participants and generates a feeling of cooperation and bonding over food.

Moreover, the packaging is designed to be used in outdoor spaces as well, such as picnics or on the beach or even on a weekend cook-out. The box itself converts to a solar cooker and the food can be warmed up after assembling and before eating.

SYSTEM MAP

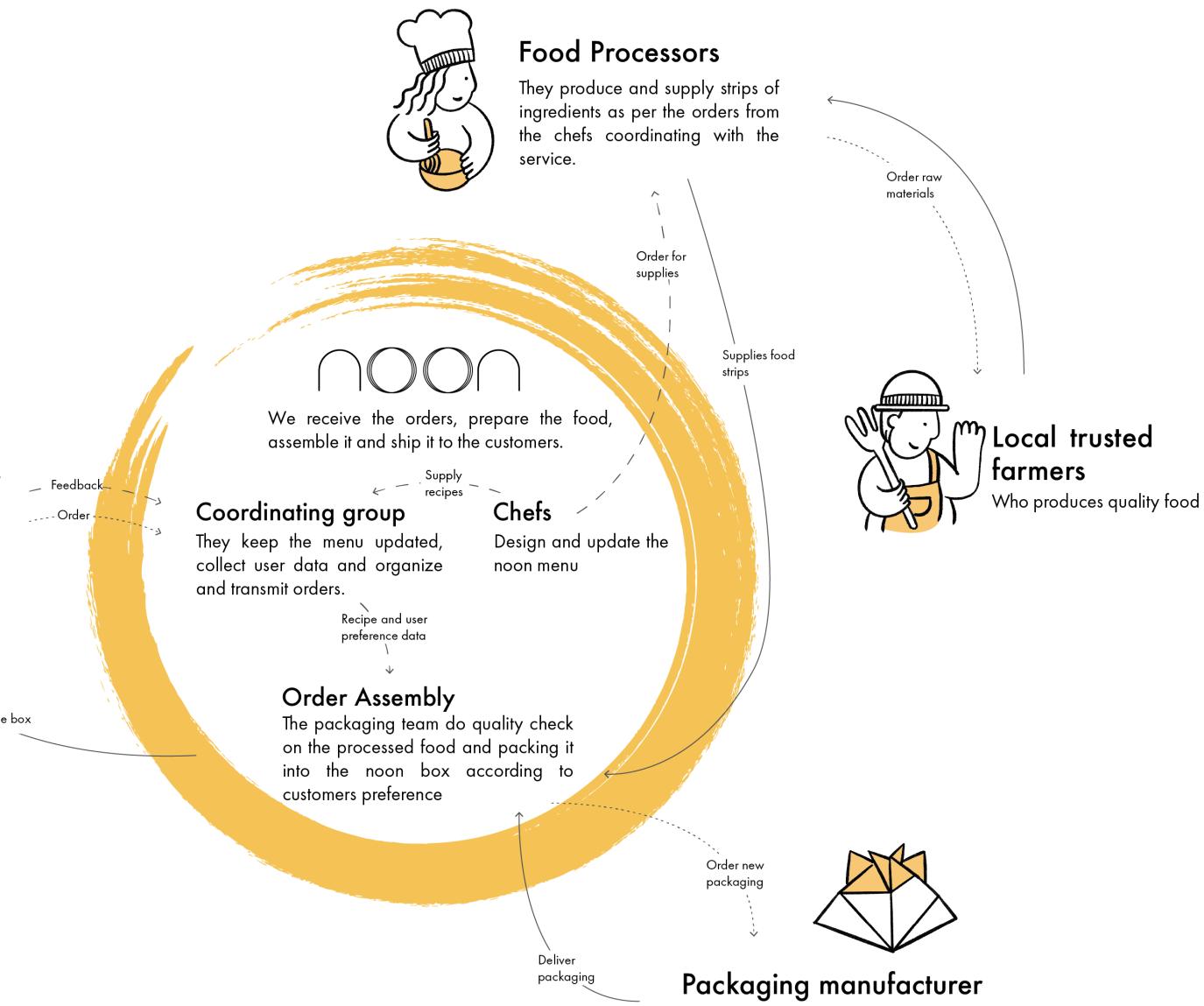


Customers

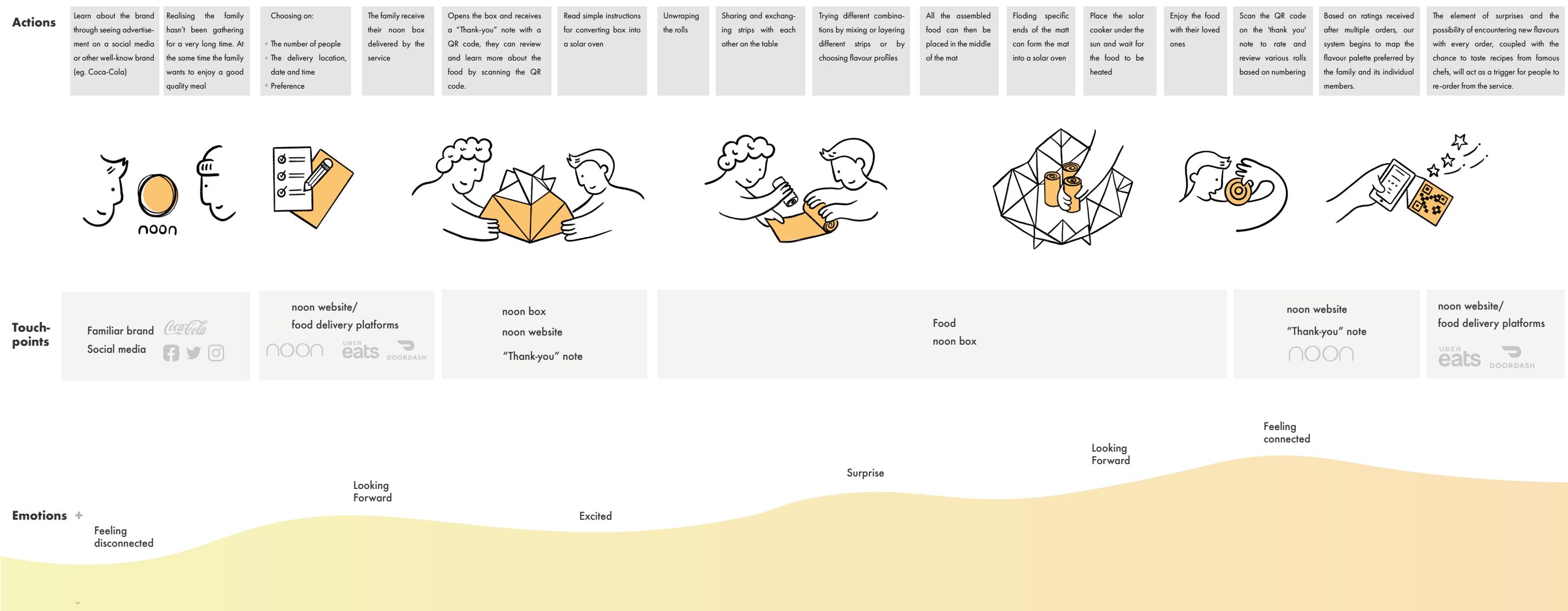
They can order the menu from our website or other delivery platforms. The noon box will then be delivered.

Customers can also provide feedbacks and preference to the service.

Material _____
Information - - - - -
Money



JOURNEY MAP





noon brand identity

HOW?



OUR VALUE, MISSION &VISION

The value of a family meal goes beyond the traditions of food and dining. It's a trivial yet important activity that defines a space where family members can share their thoughts and feelings without the fear of being judged. However in recent times, this activity has lost its significance with people being under the influence of personal pieces of technology.

Our service, through our offerings, envisages to bring back the warmth and fun of interaction to meal-time. Our product helps people experience gourmet recipes in a unique way while preparing them is made much simpler and interesting.

The mission of noon is to offer customers a new way of living in a more conscious and environmentally friendly way, offering innovative ways of socialising, offering quality and technologically advanced food. What noon offers is the opportunity to bring friends and families together in a purposeful way, discon-

necting them from lives that are too hectic and isolated and increasing their awareness of the environmental impact in their daily lives.

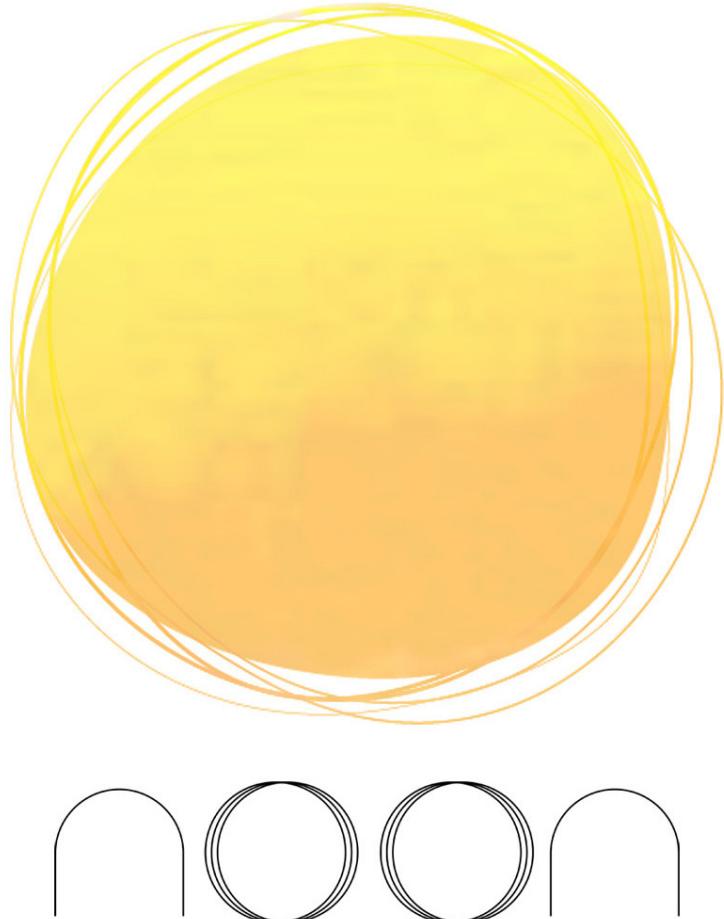
Happiness, sharing, awareness and innovation are the adjectives that distinguish the service from others, making customers more careful in their choices and happy in their lives.

In noon's ideal world, families spend a pleasant day in the park, forgetting about meetings and online classes, talking about their day while savouring the food they have created, creating moments of sharing and tranquillity, while enjoying the warmth of the sun on their skin.

MISSION STATEMENT

"To incentivise people to value meal-time with family and friends."

NAME AND LOGO



The name noon was chosen for this product because it synthesizes various aspects of it: its ability to exploit the sun in a playful and positive way, making the sun's rays the means by which to bring people together, also because it represents the ideal time to use the product, in fact, when the sun is high in the sky, in its highest position you realize the maximum potential use of the product.

The logo is simple and minimal, in fact the brand identity does not want to be too strong, allowing people to be at the center of the experience. A sun is represented with a gradient of colors reminiscent of those of a sunset, the choice was made to represent the sunset of a bad habit, that of social isolation due to technology, allowing the rise of a new everyday life more real and inclusive.

MOODBOARD

While constituting the moodboard for the noon branding and graphic design, we collected images that could represent "freshness" and "celebration". Since the brand promotes the idea of the refreshing nature of food, which brings joy to the viewers, and the aspect of "celebration" around food that symbolises a public gathering in a culinary space, this, together becomes synonymous to an interactive buffet, with the purpose of facilitating the exchange of thoughts and feelings and of mutual entertainment.

Another important aspect we wanted to add to the mix is of "indulgence", which brings fourth the idea of culinary excellence, an aspect absolutely essential for a food delivery service like ours. Further, to create an image complementary to that of the traditional barbecue, which heralds a rather masculine feel, we chose that the visual ingredients of our branding to be more soft, welcoming, almost having a more casual and fluid feel to it, such that it appears joyous, festive and very much akin to the warmth of the family.

The colour palette is warm, rather balmy and hence we made sure that the effects of this palette get highlighted in every sense.

The fluid visual interpretation of various scenes can then be almost sketch-like and transformable, making the story and the message quite simple to understand for the viewers.





#FDFCE8 #FFF6AB #FDD987 #F1CA7A #F1C052 #EB974A



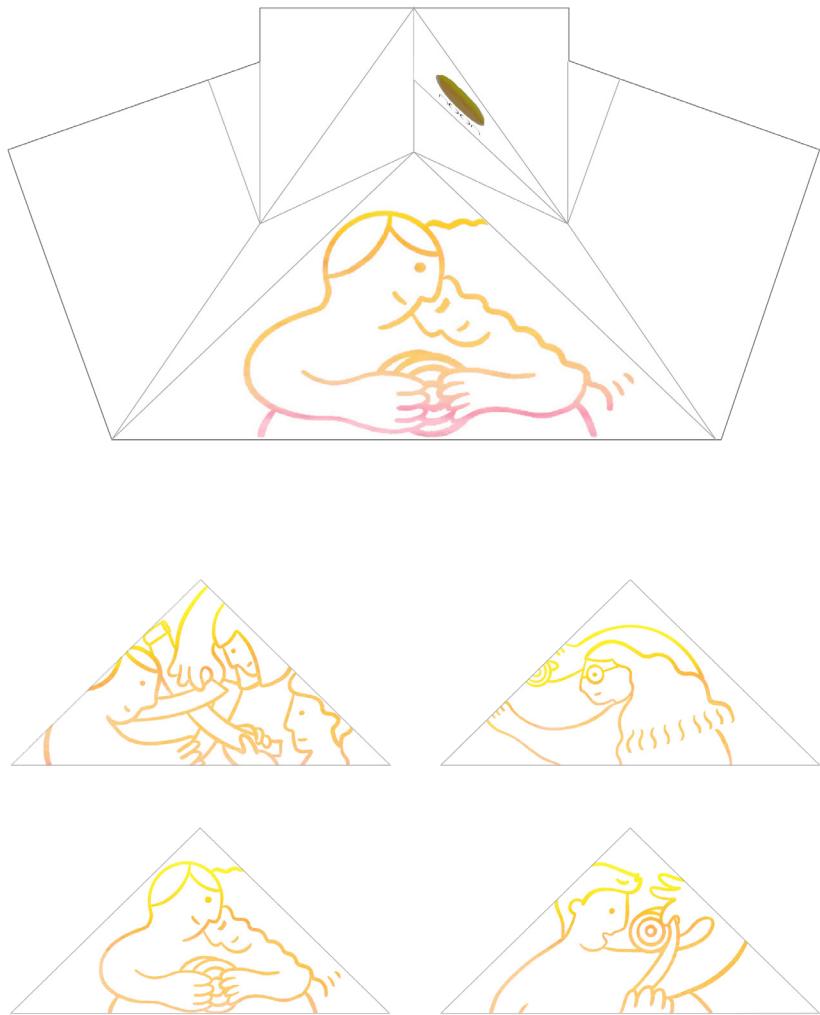
COLOR PALETTE

The color palette we chose is essentially of mild, mid-day summer-spring noon sky. The orange and yellow hues infuse a kind of citrus energy, liveliness and festivity into the brand. A gradual decay of orange to evening yellow marks the sense of a day break. Hence the palette represents a metaphorical dawn, something that's also the thrust behind our mission statement, i.e., the dawn and warmth of interpersonal relationship over the cold, lonesome landscape of technological isolation.

GRAPHIC STYLE

Realistic, sketchy, easy going and easily associable such that it is understood and related to by people of all age groups. The box on the outside depicts people interacting with what is inside, thus highlighting a sense of mystery and curiosity. Since our food is in the form of strips which need to be rolled together, the visual experience which the customer has is of seeing spiralled rolls of different colors. Hence the spiral is an apt detail to be a part of the inner box.





OUTSIDE BOX GRAPHIC

The external graphics of the packaging are minimal and essential, the colours used are those characteristic of the brand and the decorations are arranged to enhance the particular shape of the double-domed box.

On the flaps there is the logo and the name of the service, which will be visible to the customer from all angles and will help them to understand how to open the product in order to use it. In addition, the upper part of the flaps is designed to facilitate transport and delivery, making movements easier.

The graphics underneath, on the other hand, represent a sort of storytelling of the customers' experience with the product, in fact the key and characteristic moments are represented, also representing the mood of the product and the customers. A cheerful atmosphere, where you have fun in the company creating the characteristic rolls.

The layout is designed to coincide with that of the food, ensuring a logical but also physical connection between experience and food, nothing is left to chance with noon, every little detail is designed to make the customer experience more memorable.

The essential graphics also give it a sleek and very modern look, you don't want to overload the user with too much information, being overwhelmed, but to be able to contemplate the details and look forward to happy moments. This choice was also made to contrast with the interior, which was designed to have a spectacular effect on the customer.

INSIDE BOX GRAPHIC

The exterior is very elegant and basic, so as not to reveal too much information to the customer and make them feel overwhelmed by so many elements. The interior, on the other hand, is rich and spectacular, because it is the stage for the experience. The surface is completely mirrored for proper food preservation, as is often the case with food packaging, but also to make the product a solar oven. The base on which to arrange the food has a spiral, which is surrounded on four sides by the plates containing the food, which complete the design in the negative, uniting the two elements and making the connection between the two inseparable and captivating. Nothing is coincidental with the noon, in fact the spirals represent the final shape of the food to be made and become a kind of clue for the customer as to how to relate to the product.

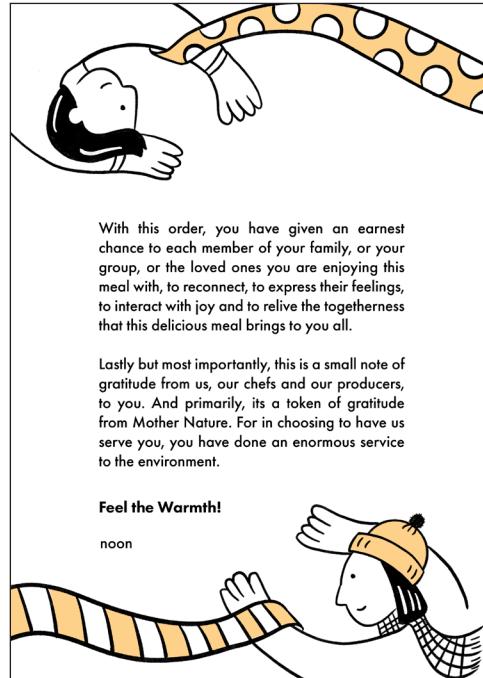
There are four plates arranged on the four corners of the packaging. Each containing three spools, each

bearing the name of the corresponding flavour and the colours indicating the degree of intensity of the flavour: yellow (light), orange (medium) and red (strong).

The apex of the spectacular effect, however, is reached when the product is in solar oven mode, in fact, the position of the spirals allows a reflection on the various mirrored surfaces, which are transformed into a three-dimensional kaleidoscope.

Spectacle and efficiency are the basis of a product that customers will love.





THANK YOU CARD

Our box is delivered to you along with a "Thank you card". It is a small gesture of respect and gratification from our service to you. Via this card, not only does each member of our service extends their gratitude, but also, all the farmer, that bring you the best quality produce, all the chefs and experts, who try their level best to do justice to what mother nature provides us, and entice you with the choicest of flavour palettes, and every person in between. Most of all, its a token of gratitude from Mother nature itself.

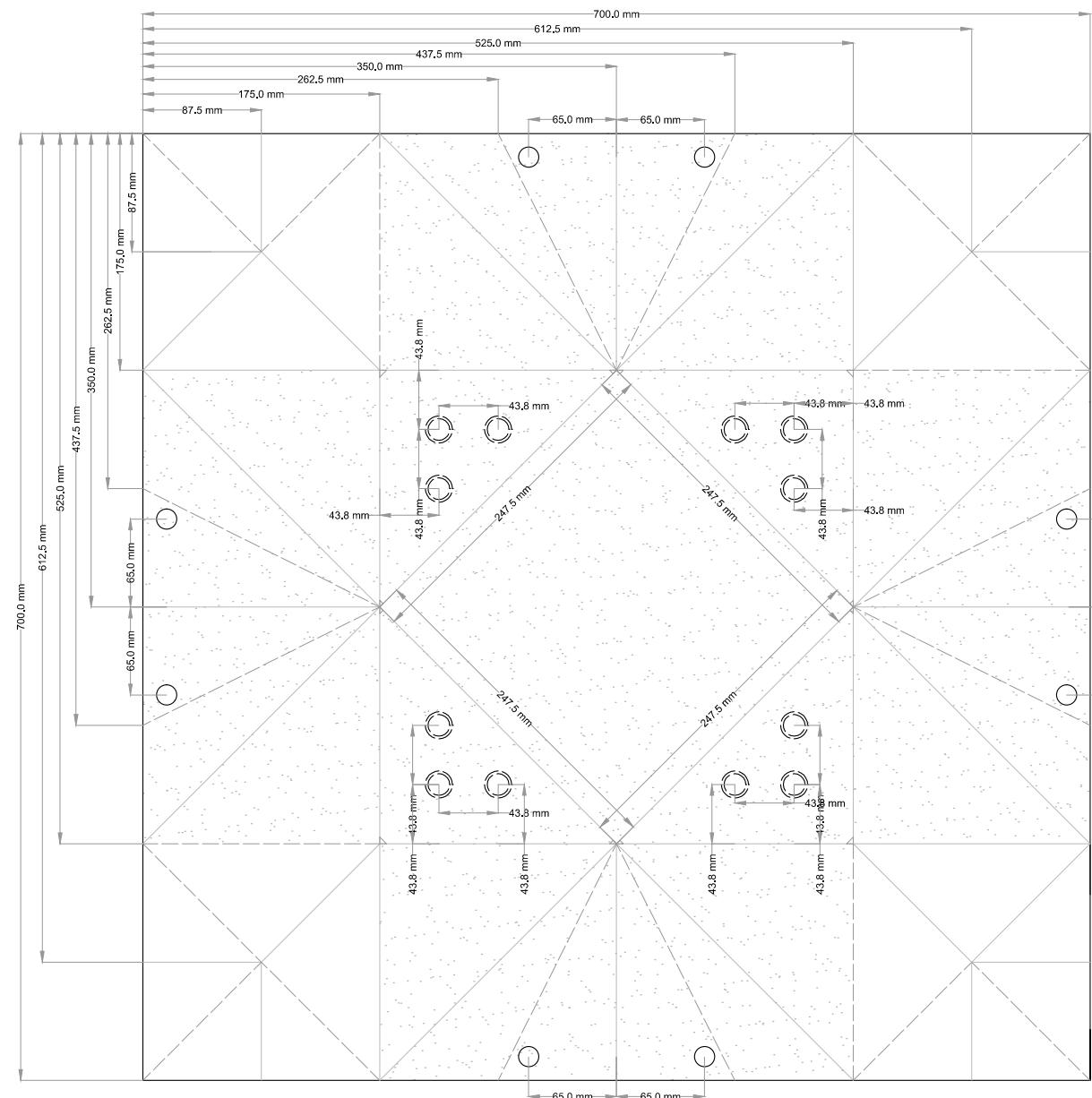
On this card, you also find a simple, step-wise instruction of how to convert your delivery box into a solar cooker. Further, there is a small QR code at the back of the card, which when scanned, will lead you to a page on our website where you can choose to rate each of the flavours you received in this box and give us suggestions on what you would prefer from us the next time you order.

And if, some day, you have a little more time on your hands and want to know more about what these delicious strips of food contain and where do they come from, just scan the QR code again and visit the rest of our website, and we assure you that you will be enthralled to know about the journey of your food, all the way from the farm to your table.



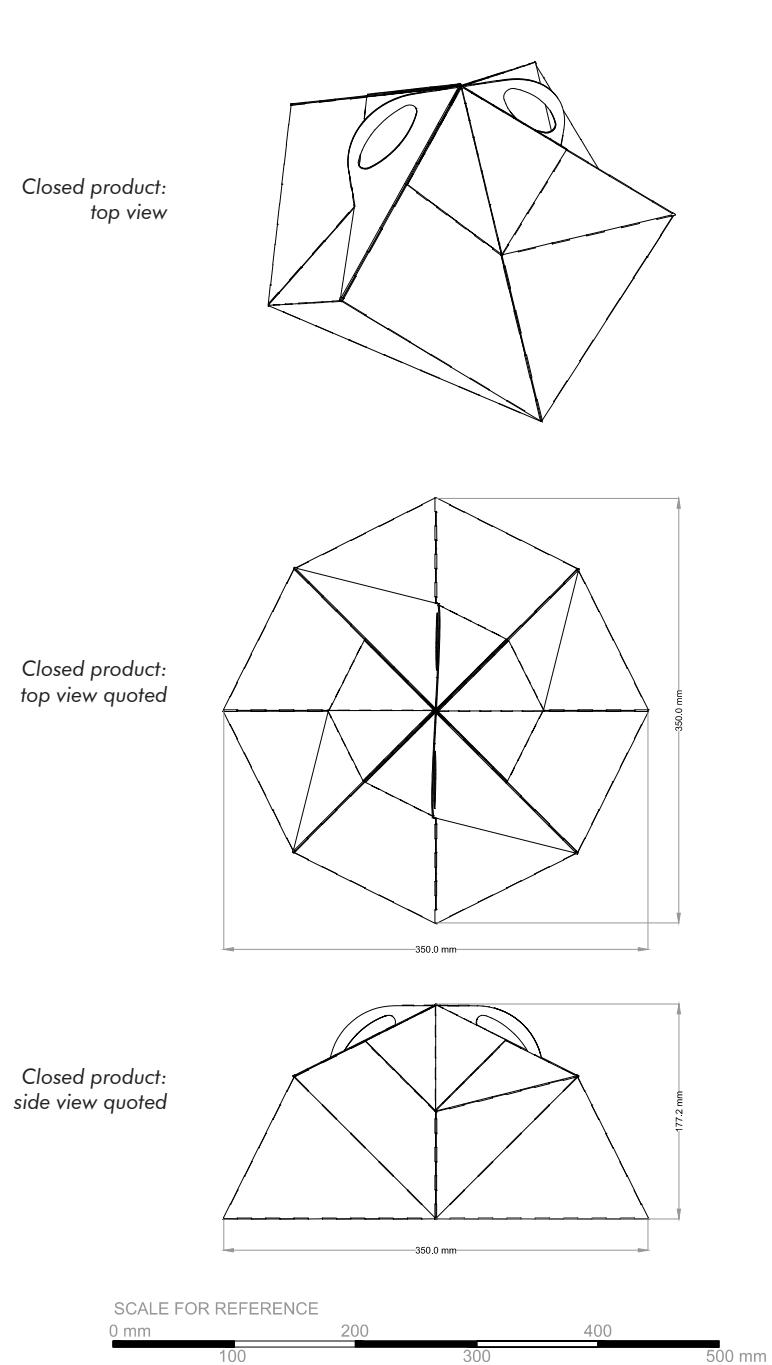
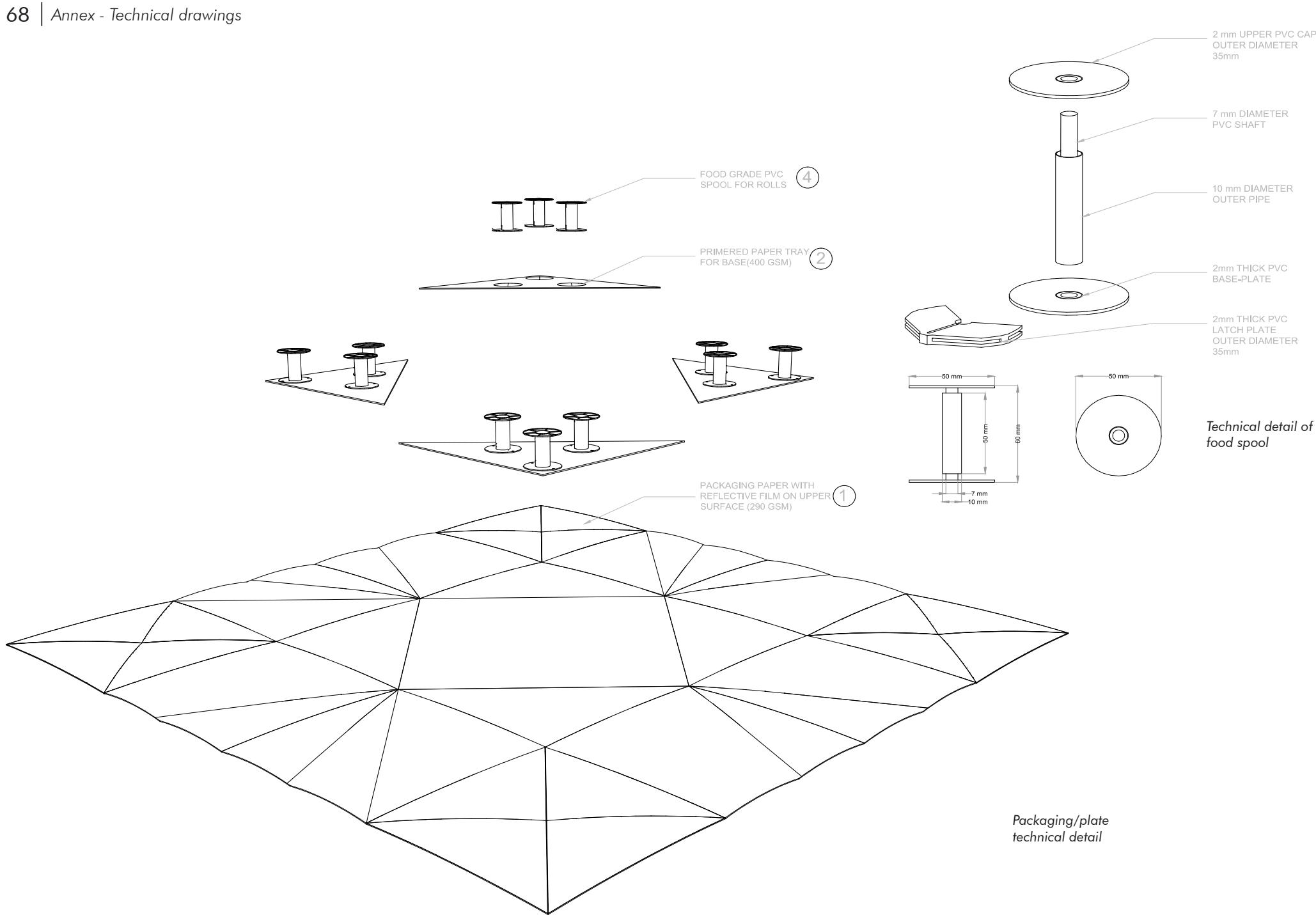
technical drawings

ANNEX



SCALE FOR REFERENCE

Open Plan for the
delivery box





technical research

ANNEX

SOLAR COOKER TECHNOLOGY

There are multiple versions and designs of solar cookers out there. Lots of the existing solar cookers are compared and tested to explore which temperatures they can reach at which hours they are most efficient and the time it takes to reach a threshold temperature. The existing solar cookers are often made of heavy materials like aluminum and glass and designed for stationary positions and thereby not designed to be transportable. Solar cookers are often designed for functionality and are too expensive for curious newcomers.

More and more solar cooker de

signs are coming to the market, which gains the interest of researchers. People are not showing the same interest, as Solar Cookers have not yet (in 2012 at least) caught the imagination of people. The challenges of solar cookers are manufacturing, evaluation of efficiency and the cost. The paper by Patil constructs a list of advantages and disadvantages of solar cookers: Panel cookers, which we focused on, making use of large reflective surface areas that can direct the sunlight to the center, where the food is placed.



For our product we envision other qualities than functionality and efficiency. We seek a solution that is cheap, transportable and lightweight. These requirements result in a less functional and efficient solar cooker, but with the food our customers are going to heat and the average temperatures in California, it will still create enough energy to heat the food.

Patil, Rajendra. (2012). An Overview of Solar Cookers. Journal "Electronics, Communication, Soft Computing Science & Engineering. 258-264.

PLANT-BASED MEAT

Plant-based products are rich in protein, can be constructed in many ways and save the lives of animals. There are many advantages of plant-based meat vs. real meat. A typical discussion about plant-based meat is the production process. Namely making the plant-based meat look like real meat. That means having the right forms, color, flavor and details like letting a steak bleed when cooked.

The appearance of the sheets of food that our customers are eating is trying to dissociate from the discussion about food design. Keeping the plant-based sheets as natural as possible will reduce greenhouse gasses for production processes. We are not hiding the fact that it is not real meat, we are in fact trying to emphasize this by natural colors and flavors.

We let a piece of cauliflower appear like a sheet of cauliflower instead to reconfiguring the appearance of it into pork.

<https://www.integratedeating.com/blog/2020/2/17/the-raw-truth-about-plant-based-burgers>

ADVANTAGES

- Less water for the production process**
- Reduced environmental impact of the entire manufacturing process**
- Less waste of raw materials**
- Increased food safety, avoiding possible contraindications of poorly preserved meat**
- More possibilities to design food**





design process

ANNEX

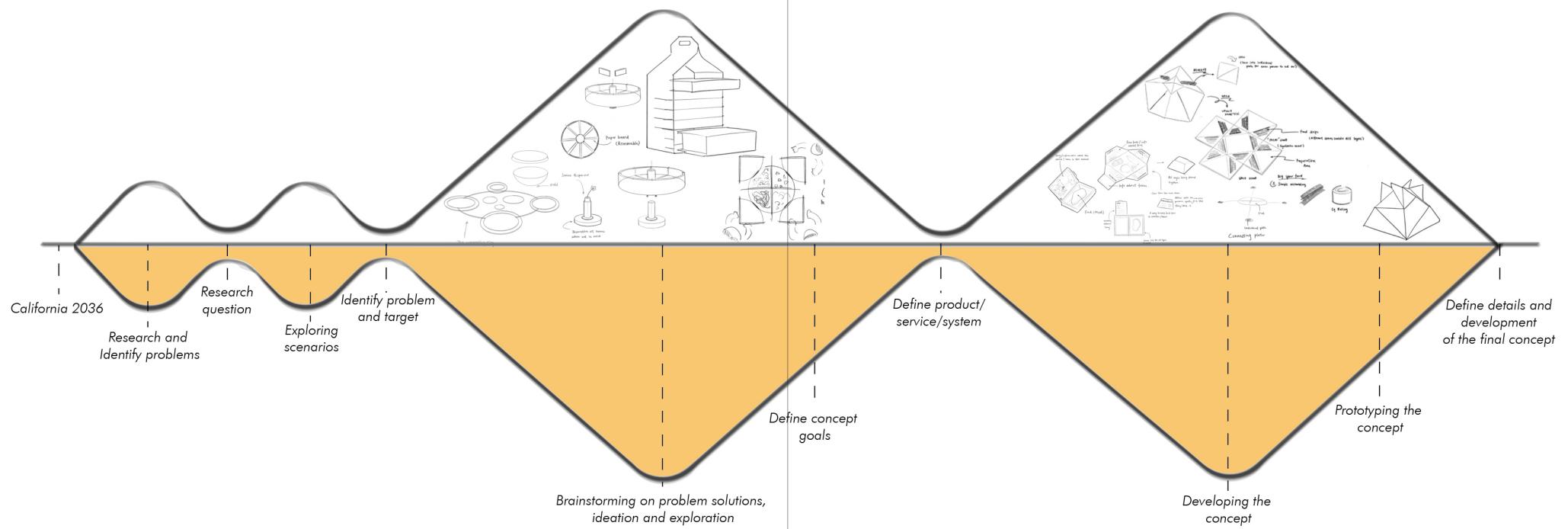
NOON PROCESS OF EVOLUTION

The design process started with the research on the overall scenario of uncertainty of living in California in 2036. Several problems were identified and narrowed down to the research question of how we can protect the social fabric of interpersonal rela-

tionship from being ravaged upon in this hyper-connected digital society. Exploring different scenarios, we identified the problem related to working from home, and living in your workspace. Thus, family interaction over meals became the core of our solution.

An iterative process started with a combination of divergent brainstorming, ideation and further research, and thereby defining concept goals to narrow it down to the general idea of our product service system. We went into the last phase, having settled on the solution

of using the sun to create a food experience to gather families. A new research on solar cooking led to prototyping and further process on defining the final concept.





academic references

ANNEX

ACADEMIC REFERENCES

Climate change in California

- Westerling, A. L., & Bryant, B. P. (2008). Climate change and wild-fire in California. *Climatic Change*, 87(1), 231-249.
- Lenihan, J. M., Drapek, R., Bachelet, D., & Neilson, R. P. (2003). Climate change effects on vegetation distribution, carbon, and fire in California. *Ecological Applications*, 13(6), 1667-1681.
- Franco, G., Cayan, D., Luers, A., Hanemann, M., & Croes, B. (2008). Linking climate change science with policy in California. *Climatic Change*, 87(1), 7-20.
- Hunt, A., & Watkiss, P. (2011). Climate change impacts and adaptation in cities: a review of the literature. *Climatic change*, 104(1), 13-49.

Working from home in 2036

- Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal of Economics*, 130(1), 165-218.
- De Graaff, T., & Rietveld, P. (2007). Substitution between working at home and out-of-home: The role of ICT and commuting costs. *Transportation Research Part A: Policy and Practice*, 41(2), 142-160.
- Gajendran, R. S., & Harrison, D. A. (2006). The good, the bad, and the unknown about telecommuting: meta-analysis of individual consequences and mechanisms of distributed work. In *Academy of Management Proceedings* (Vol. 2006, No. 1, pp. D1-D6). Briarcliff Manor, NY 10510: Academy of Manage.

- Nakrošien, A., Bučinien, I., & Goštautait, B. (2019). Working from home: characteristics and outcomes of telework. *International Journal of Manpower*.

- Wen, L. M., Kite, J., & Rissel, C. (2010). Is there a role for workplaces in reducing employees' driving to work? Findings from a cross-sectional survey from inner-west Sydney, Australia. *BMC Public Health*, 10(1), 50.

- Wiesenfeld, B. M., Raghuram, S., & Garud, R. (2001). Organizational identification among virtual workers: The role of need for affiliation and perceived work-based social support. *Journal of management*, 27(2), 213-229.

Importance of family gathering

- Bossard, J. H. (1943). Family table talk--an area for sociological study. *American Sociological Review*, 295-301.
- Chu, Y. L., Storey, K. E., & Veugelers, P. J. (2014). Involvement in meal preparation at home is associated with better diet quality among Canadian children. *Journal of nutrition education and behavior*, 46(4), 304-308.
- Ferdous, H. S., Ploderer, B., Davis, H., Vetere, F., O'Hara, K., Farr-Wharton, G., & Comber, R. (2016, September). TableTalk: integrating personal devices and content for commensal experiences at the family dinner table. In *Proceedings of the 2016 ACM international joint conference on pervasive and ubiquitous computing* (pp. 132-143).

- Ferdous, H. S. (2015, April). Technology at mealtime: beyond the 'ordinary'. In Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (pp. 195-198).

- AH Kun, L. M., & Marsden, G. (2007, September). Co-present photo sharing on mobile devices. In Proceedings of the 9th international conference on Human computer interaction with mobile devices and services (pp. 277-284).

- Barden, P., Comber, R., Green, D., Jackson, D., Ladha, C., Bartindale, T., ... & Olivier, P. (2012, June). Telematic dinner party: designing for togetherness through play and performance. In Proceedings of the Designing Interactive Systems Conference (pp. 38-47).

FAST & SERIOUS

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