



A FLUID APPROACH TO THE KIOSK EXPERIENCE

# PLASTICITY

KAY

CLAIRE

MARLI

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# PROJECT STATEMENT

The Office of International Program (OIP) at K-State wants to recruit more international students from multiple countries.

The OIP requests to design a moveable pop-up stand at a foreign institution that introduces K-state programs and makes a plan ahead for students to apply to study abroad at K-state in the near future.

- \* Consciousness of alternate points of view
- \* Appreciation of cultural diversity
- \* Mobility, flexibility, ergonomics & anthropometrics
- \* Move-able, outdoor kiosk design
- \* Self efficient solar power
- \* Shelter from weather
- \* Disassemble for storage at night
- \* Advertisement
- \* Display system
- \* Electrical power storage
- \* Inspiration from famous designer

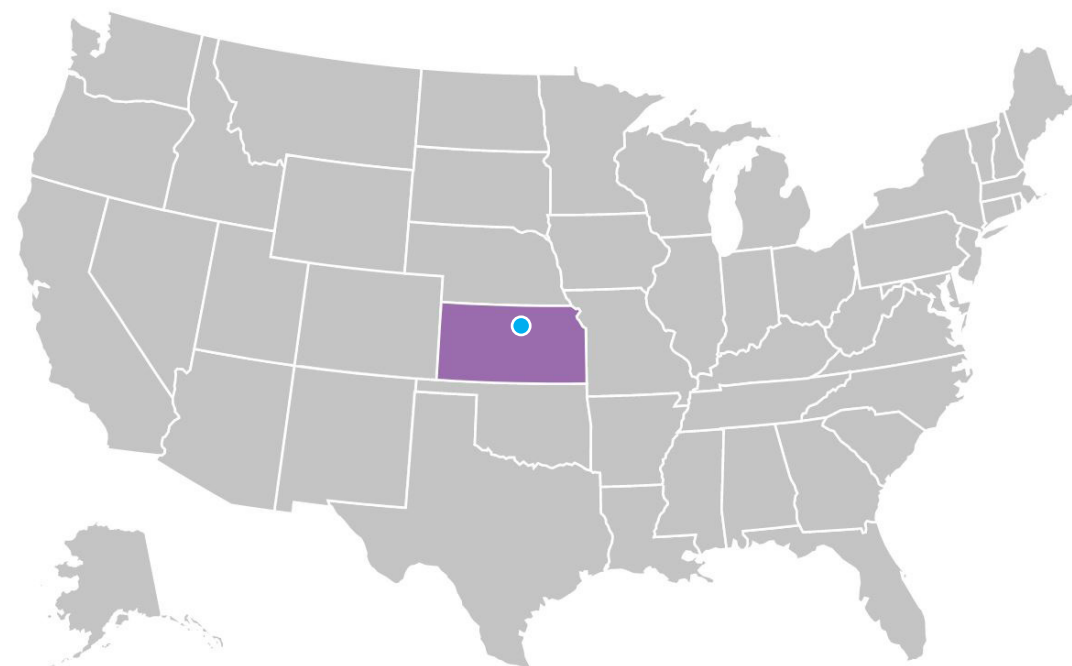
# CLIENT

Kansas State University

캔자스 주립 대학

## GOALS

- ✕ Move-able Kiosk
- ✕ Located on a Foreign Institutes Campus
- ✕ Information on K-State Programs
- ✕ Increase Study Abroad Participants at K-State



## FACTS

- ✕ 21,719 students attend Kansas State.
- ✕ 1,471 international students attend Kansas State University from 103 countries
- ✕ 37 of those students are from South Korea
- ✕ 454 international faculty at K-State
- ✕ There are 250 majors offered by Kansas State

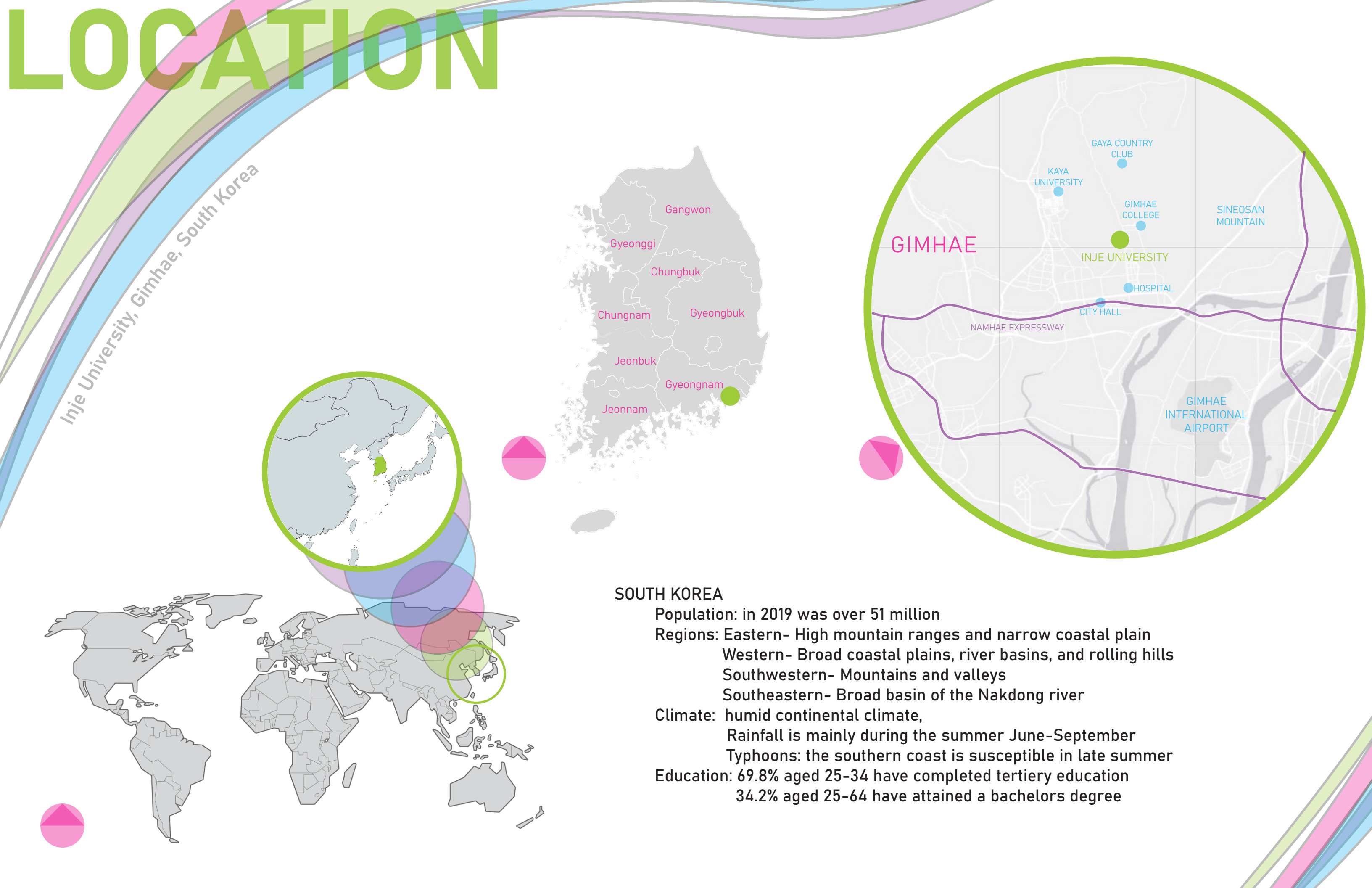
**The Princeton Review ranks Kansas State among the top 20 US universities:**

- #3 in best quality of life
- #5 in great campus and community relations
- #5 in athletic schools
- #7 in happiest students
- #11 in best career services
- #11 in athletic event attendance by students
- #14 in best run colleges
- #16 in intramural sports involvement





# LOCATION



## SOUTH KOREA

Population: in 2019 was over 51 million

Regions: Eastern- High mountain ranges and narrow coastal plain

Western- Broad coastal plains, river basins, and rolling hills

Southwestern- Mountains and valleys

Southeastern- Broad basin of the Nakdong river

Climate: humid continental climate,

Rainfall is mainly during the summer June-September

Typhoons: the southern coast is susceptible in late summer

Education: 69.8% aged 25-34 have completed tertiary education

34.2% aged 25-64 have attained a bachelors degree

# ARCHITECT *Karim*



Industrial Designer

Interior Design Lighting Products Furniture Branding Surfaces Packaging



Organic



Vibrant Color Vs. White



Plastic



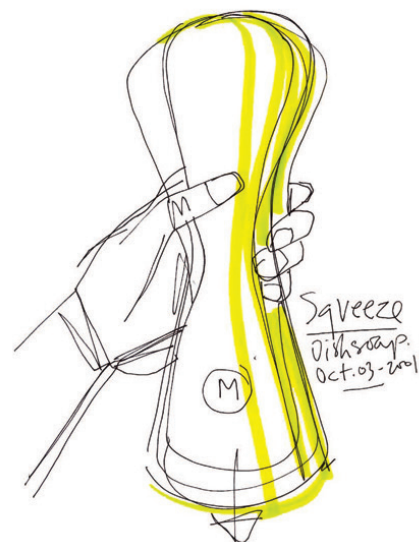
Subtractive



Transformation



Function



Egyptian Born  
Canadian Raised  
US Citizen

300+ awards  
Working in 40+ countries  
4,000 designs in production

"Prince of Plastic" & "most famous  
industrial designer in all the Americas"  
- Time Magazine

Based out of: New York, Belgrade, Miami, Mexico

# SITE

## INJE UNIVERSITY NEULBIT HALL

Major traffic way on campus

Houses several club room

Student association room

Inje University Newspaper on the 3rd floor

Broadcasting station on the 2nd floor

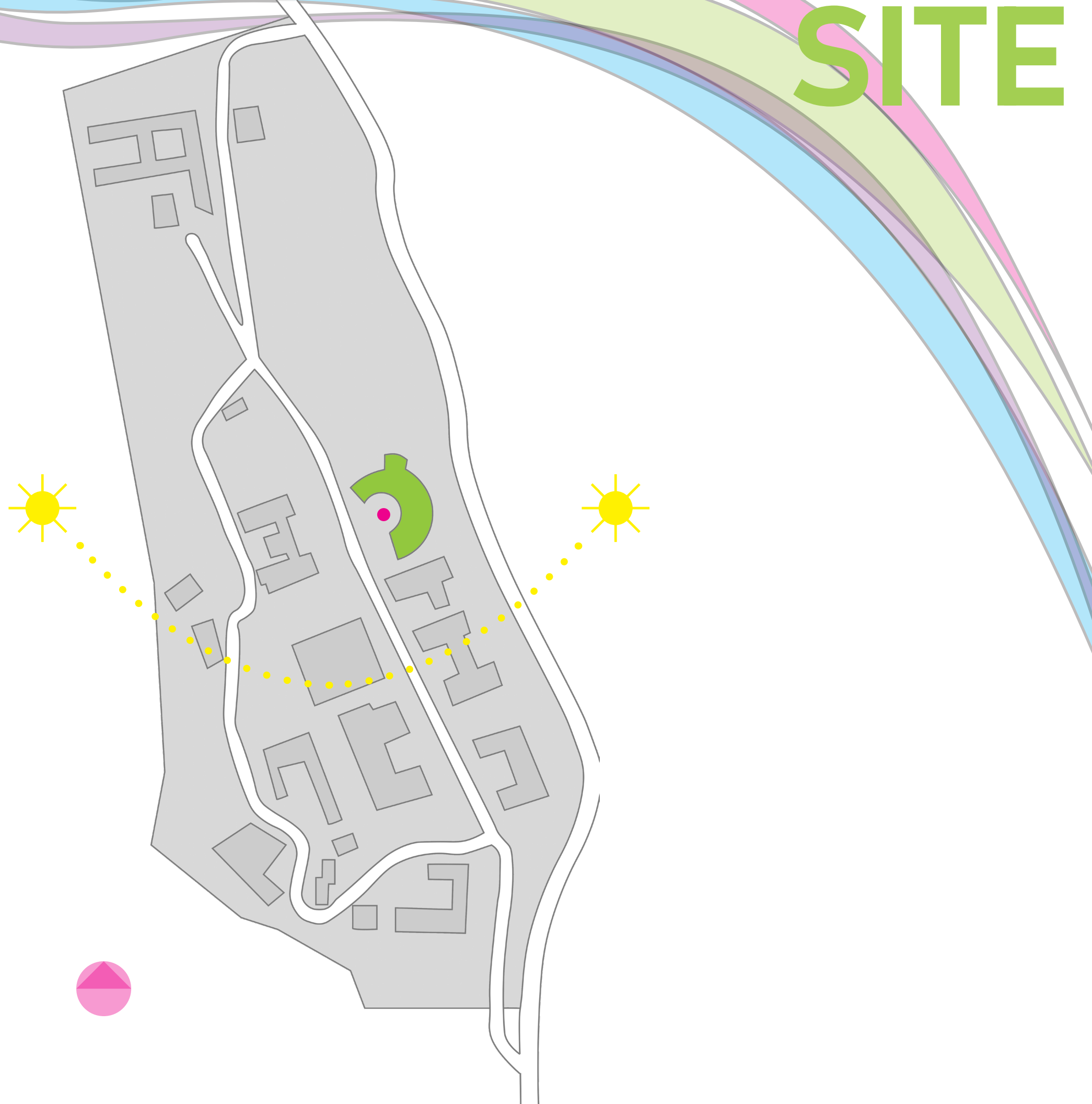
Student Welfare Office is located on the 1st and 2nd floor

Neulbit Hall restaurant

Convenience stores open until 11:00 during the semester

Snack corner

Consumer Union Center for stationery and office supplies





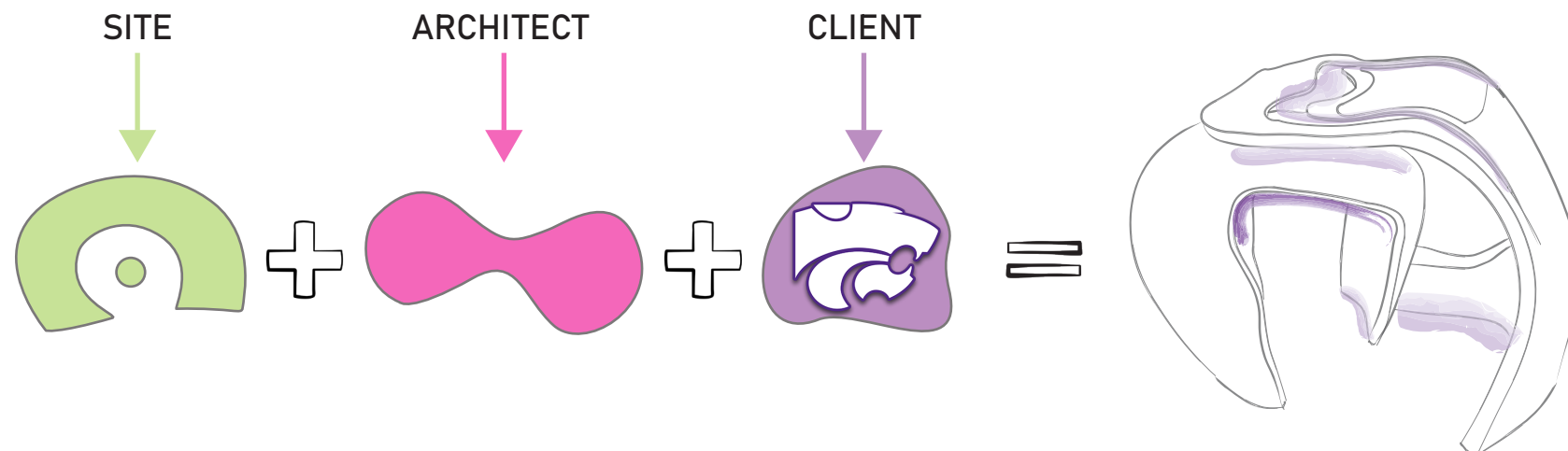
# CONCEPT

Our concept came from the combined influences of our architect, Korean culture, and the attributes a person would need to adapt to being a foreign exchange student.

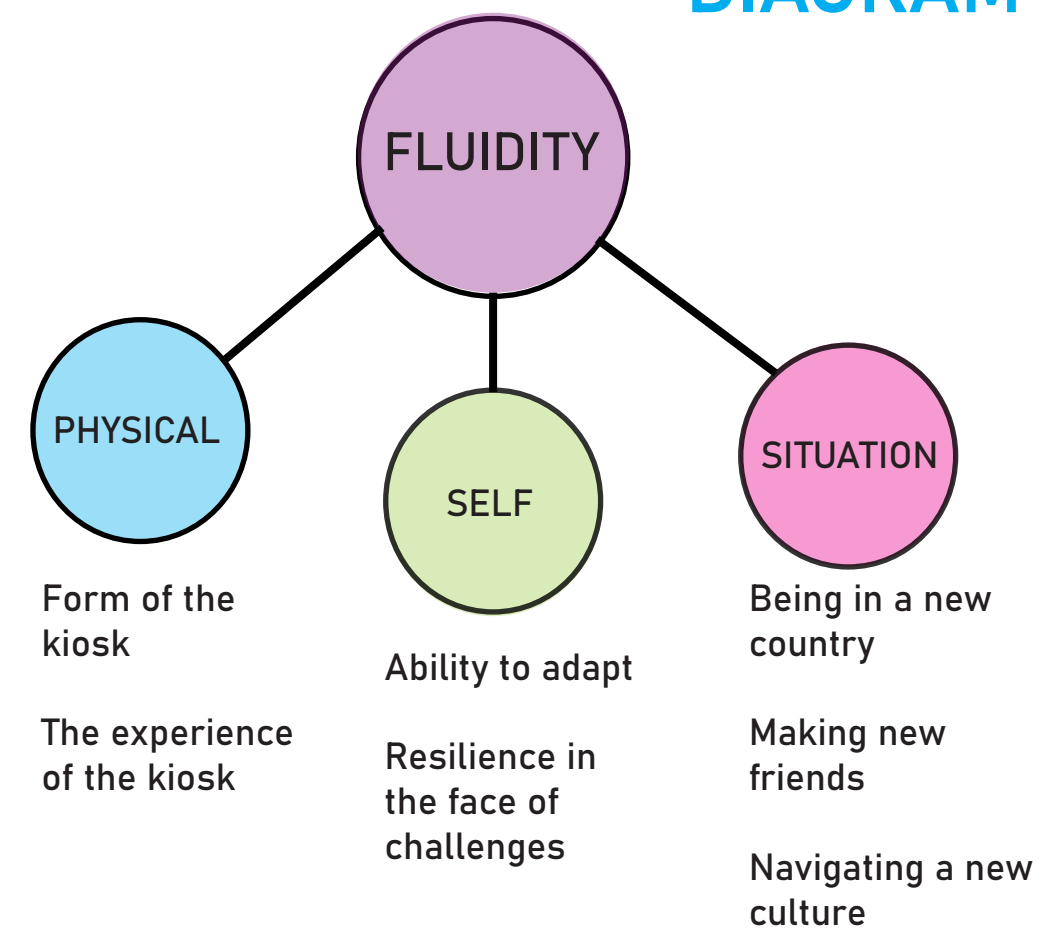
**Fluidity** is the word we felt best embodied those influences. One needs to be **fluid** to **adapt** to a new environment and we wanted to show that Kansas State understands that and has plenty of resources to help exchange students navigate that transition.

The form of our kiosk is **organic** and so is the **circulation** through it. Not only is it physically organic, so is the way a student would collect the information they need. Through QR codes, they can reach any part of the application process, K-State's website, or support clubs. This allows a student to go about their day **uninterrupted** so they can **flow** through their schedule and when they have time, all the resources they need are at their fingertips.

## PHYSICAL APPLICATION DIAGRAM



## CONCEPTUAL DIAGRAM

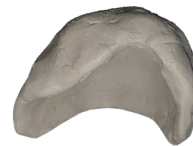
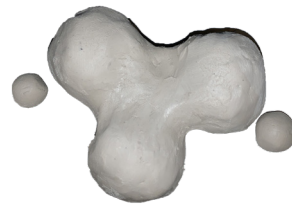


# INITIAL IDEAS

## INSPIRATION PHOTOS



## MINI CLAY MODELS

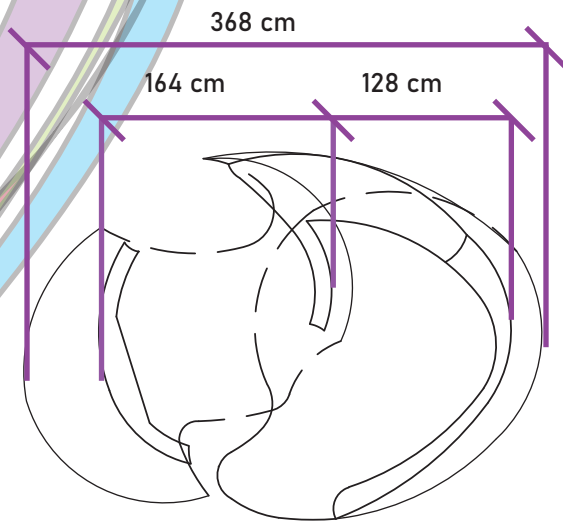


## FINAL CLAY MODEL

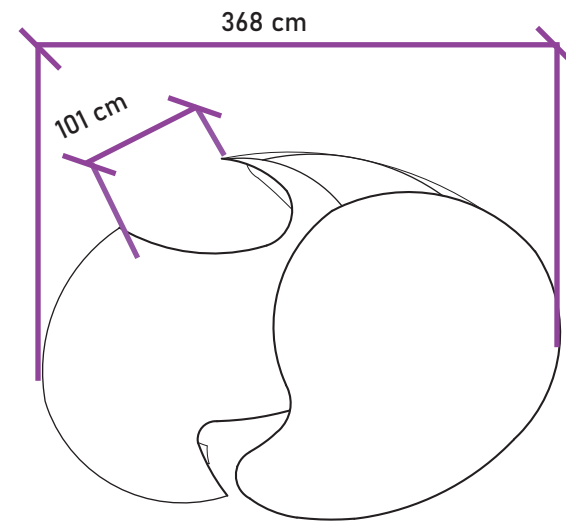


## CONCEPTUAL SKETCH

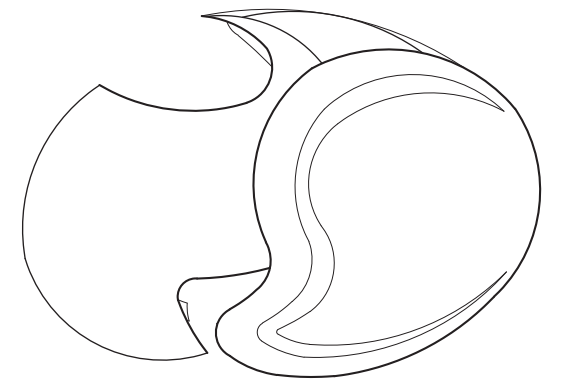
# PLANS



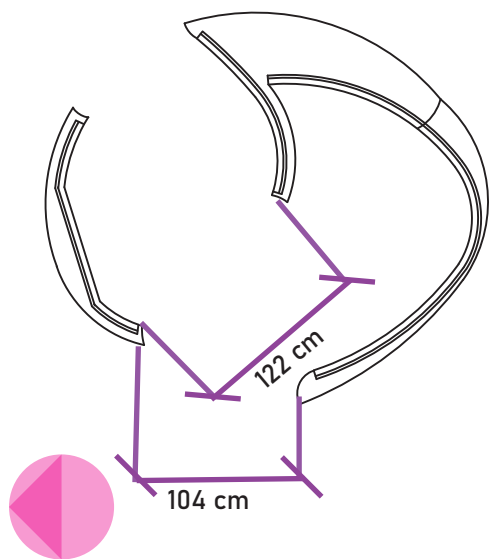
FLOOR PLAN: N/S



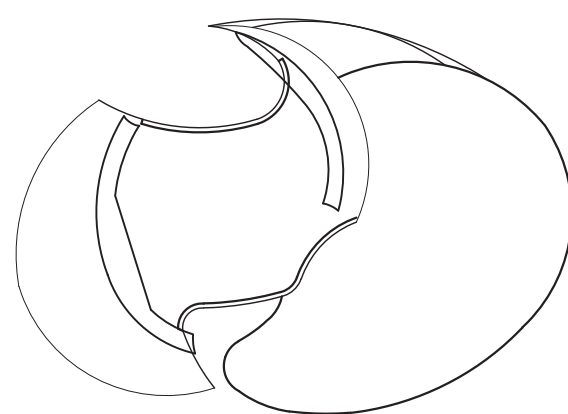
OVERHEAD PLAN: N/S



SKYLIGHT PLAN: N/S



UNDERLIGHT PLAN: N/S



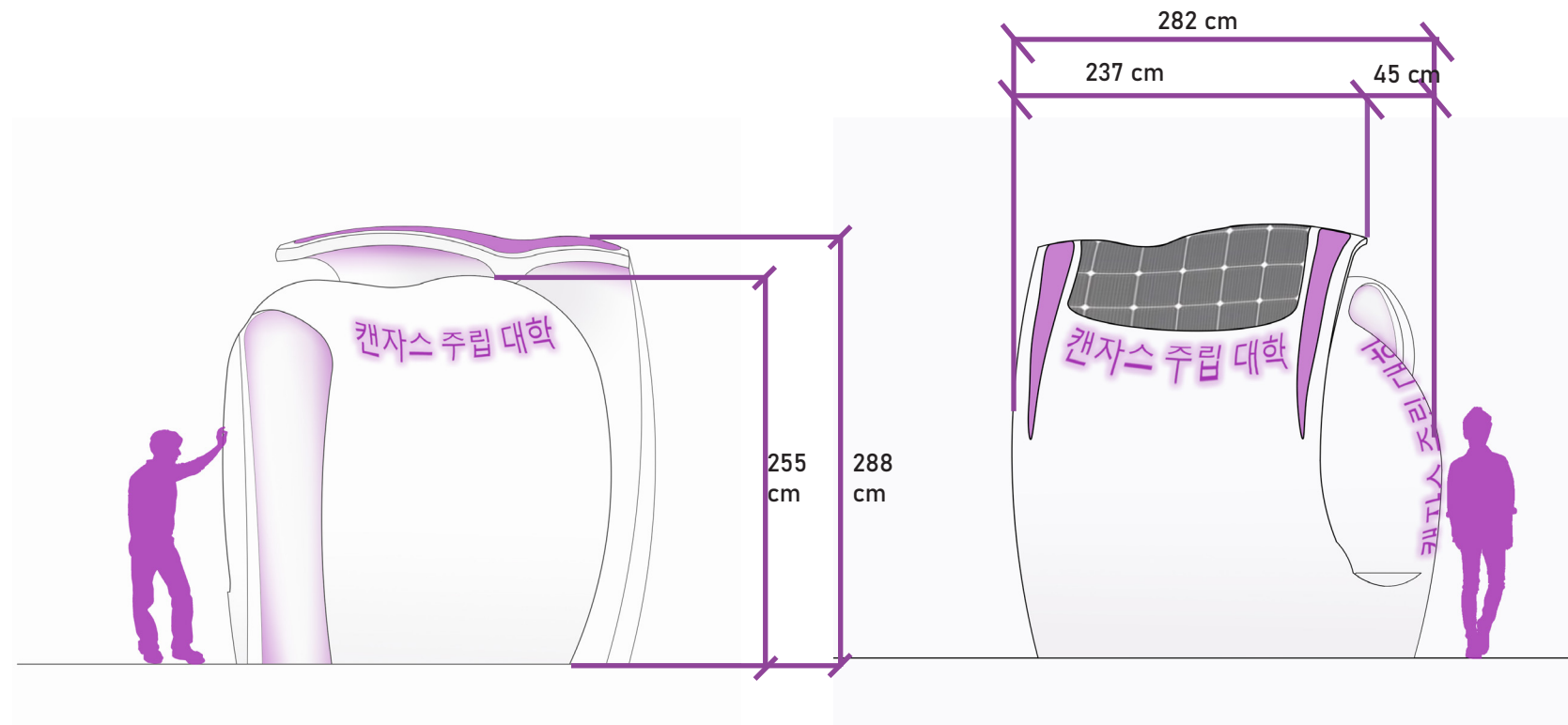
POD LIGHT PLAN: N/S



OVERHANG LIGHT PLAN: N/S

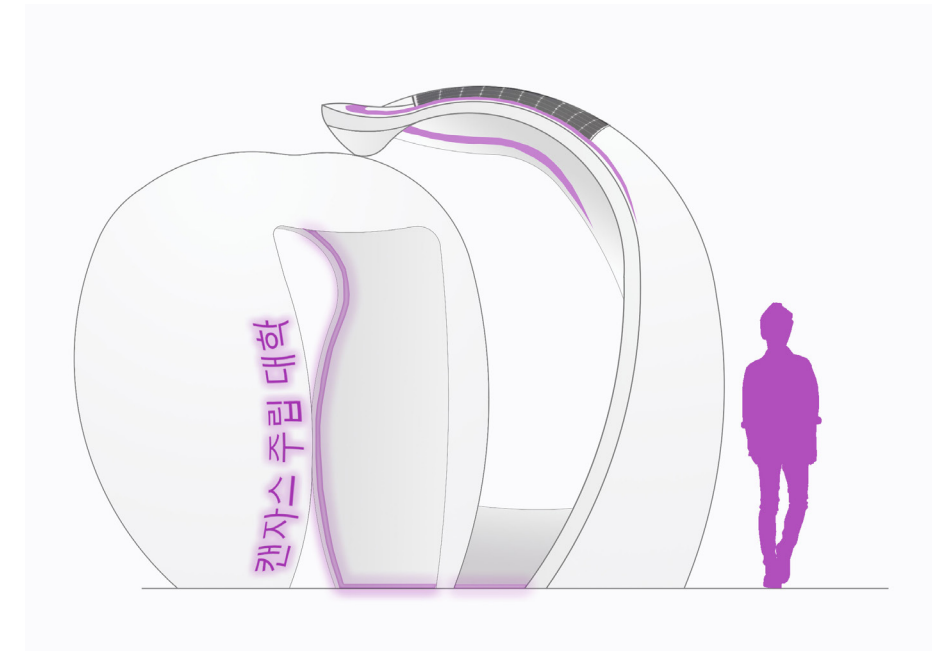


# EXTERIOR ELEVATIONS

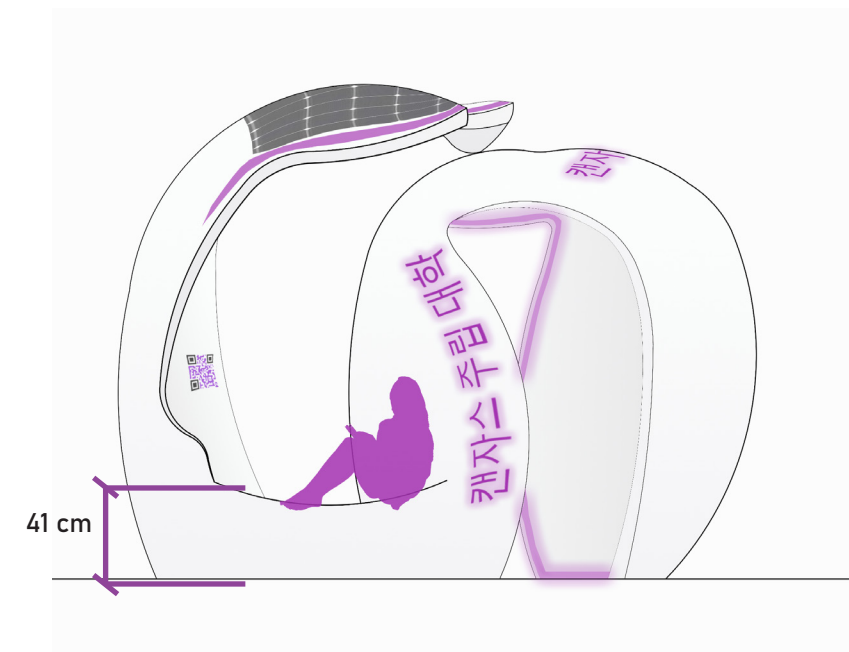


NORTHERN ELEVATION: N/S

SOUTHERN ELEVATION: N/S



EASTERN ELEVATION: N/S

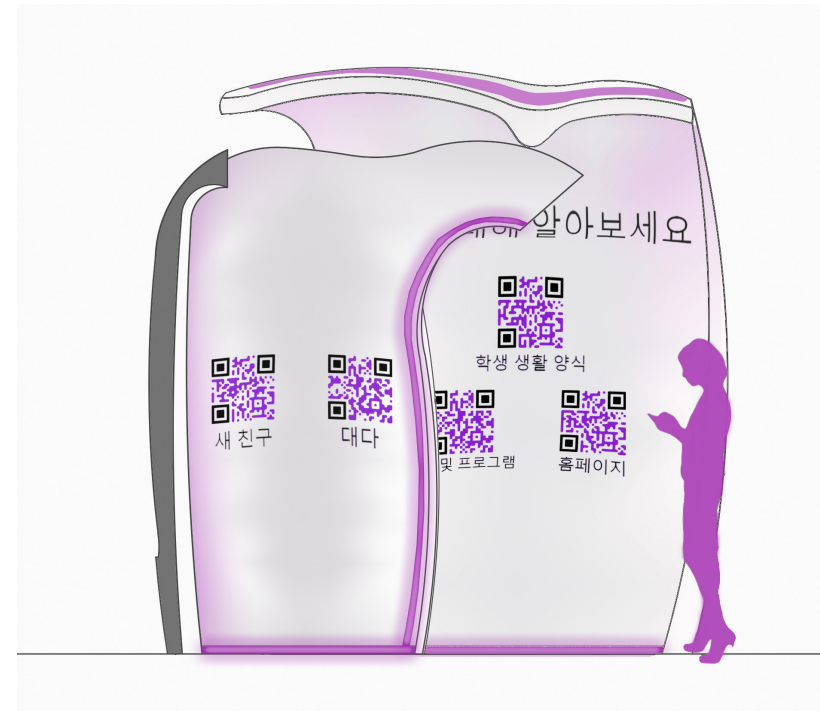


WESTERN ELEVATION: N/S

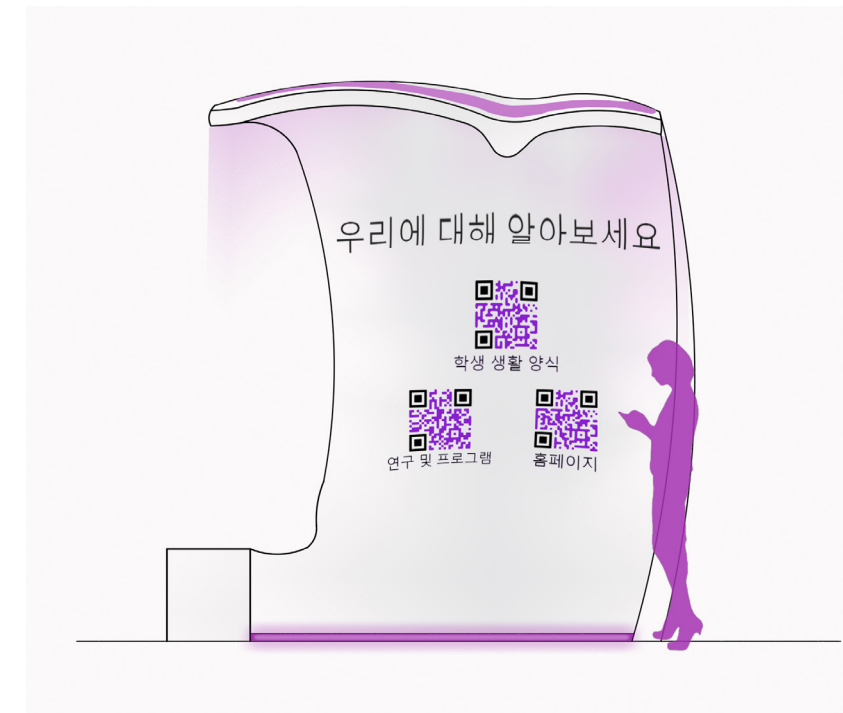
# INTERIORS



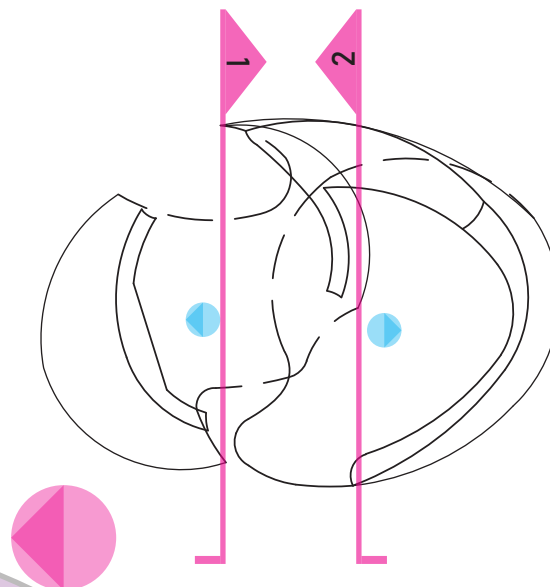
NORTH POD WALL ELEVATION: N/S



1 SOUTH POD SECTION: N/S



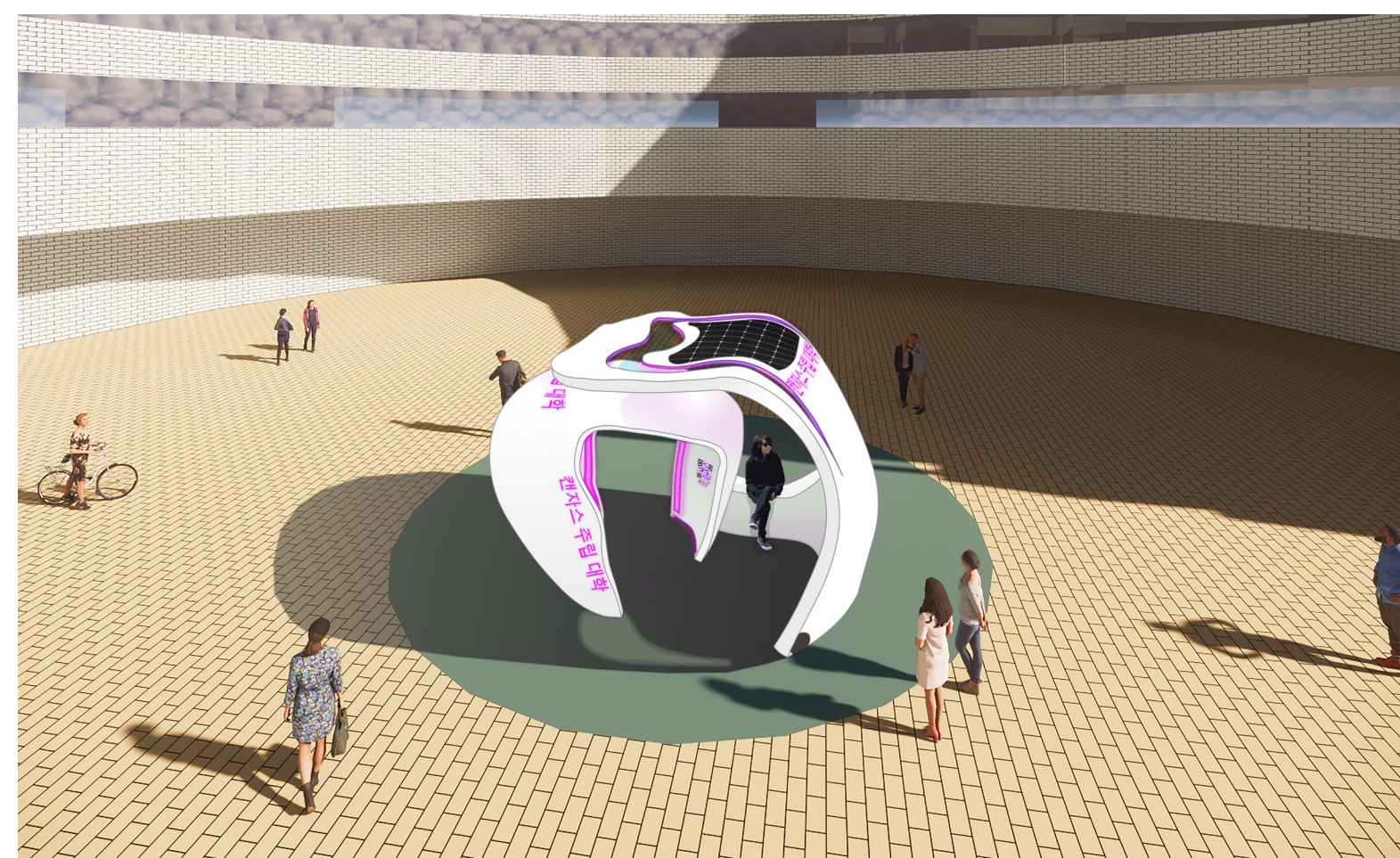
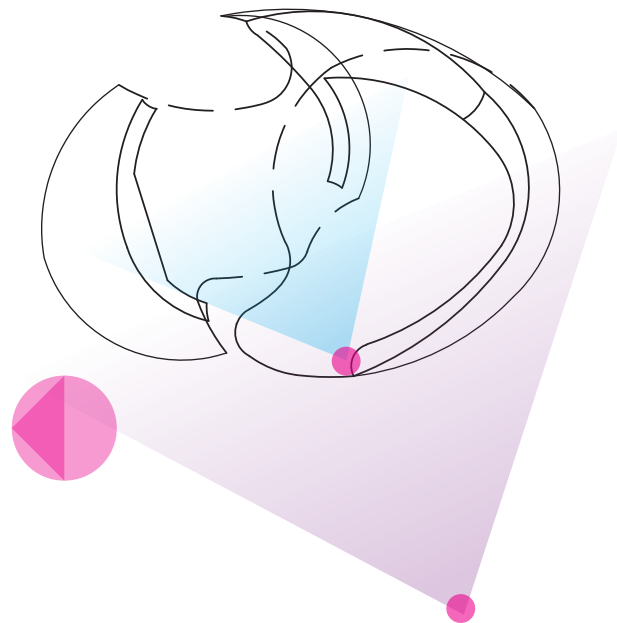
SOUTH OVERHANG WALL ELEVATION: N/S



2 NORTH OVERHANG SECTION: N/S

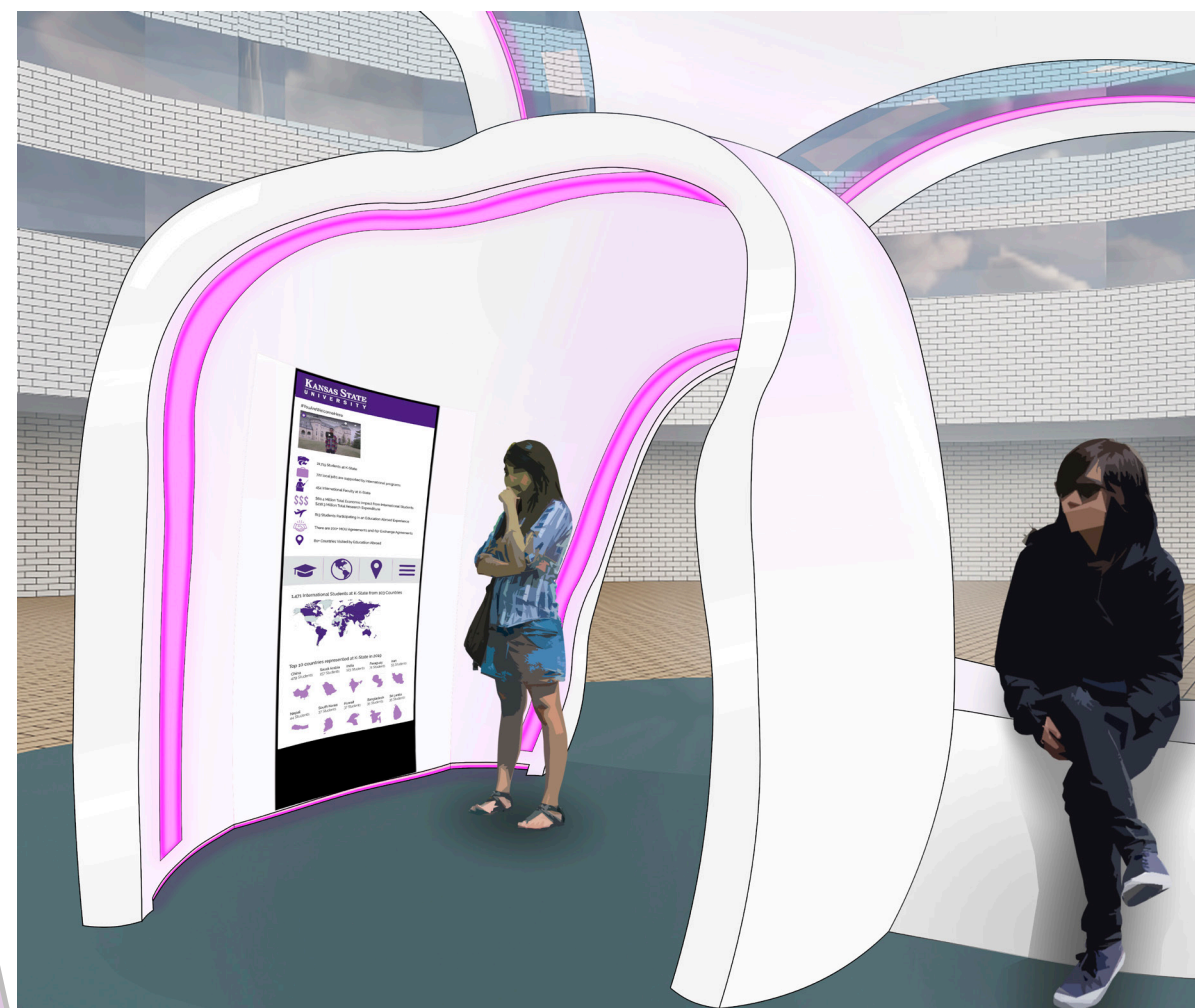


# DAY FLOW



## EXTERIOR PERSPECTIVE: N/S

The exterior perspective above is shown inside the curve of Neulbit Hall. This is a high traffic location that many students frequent. The placement of the kiosk draws attention to it.

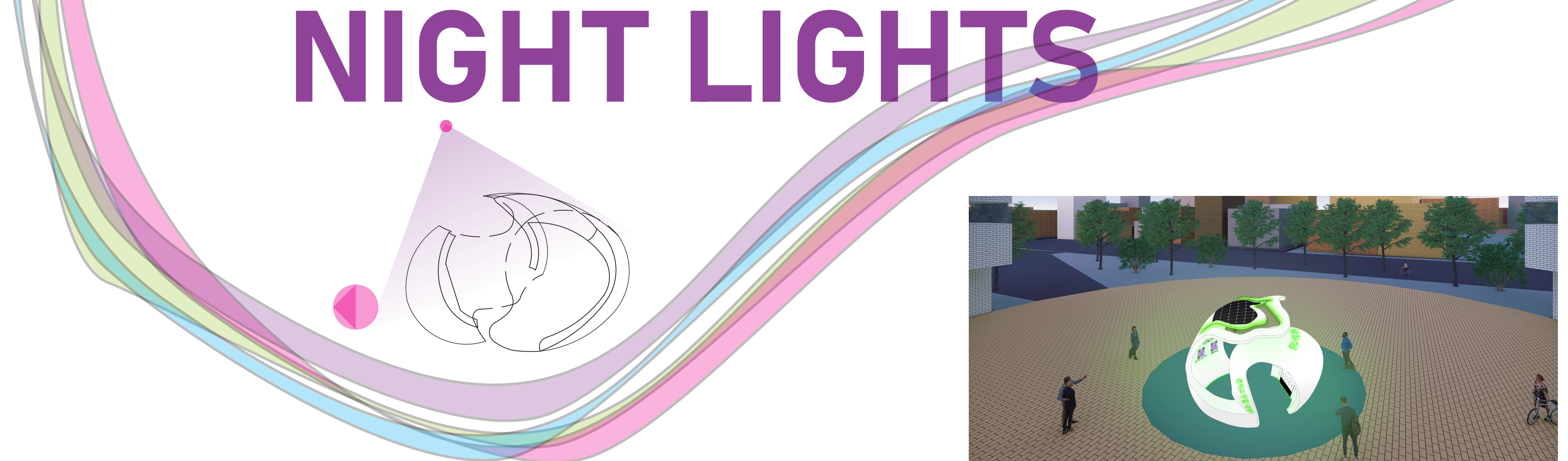


## INTERIOR PERSPECTIVE: N/S

The interior perspective to the left shows that a student can take a moment to sit on the bench and relax while reading on their phone about Kansas State. They can also pass by the interactive touch screen if they'd like to use it to look up information on Kansas State and what they might do there.



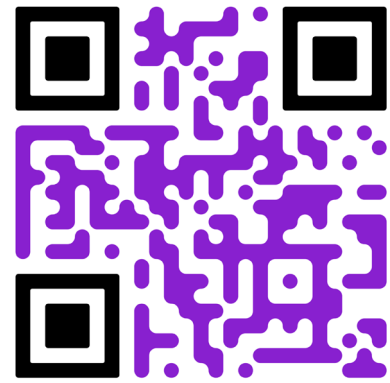
# NIGHT LIGHTS



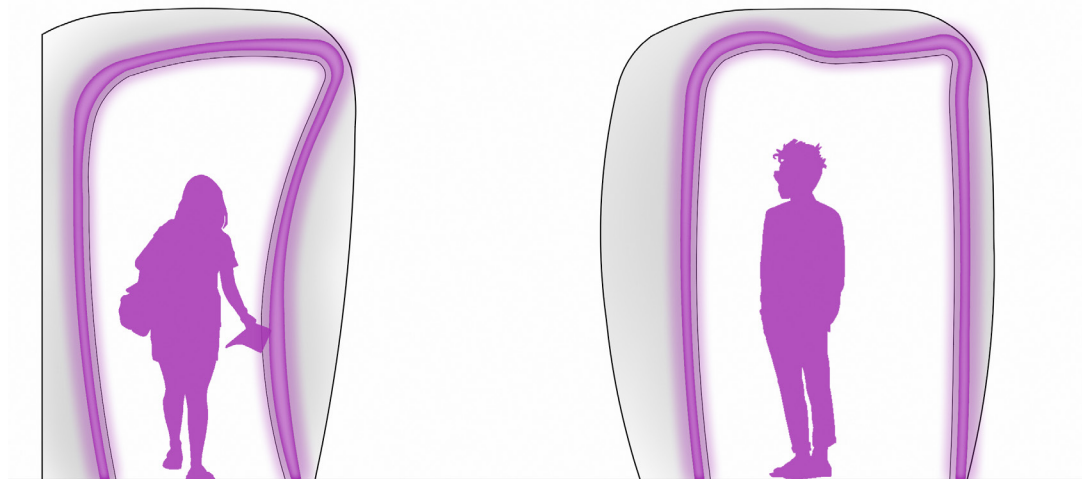
The image is a composite of two parts. The left part is a conceptual diagram featuring a stylized eye or camera lens with a pink dot and a purple cone of light. The right part is a 3D rendering of a public art installation, a white, sculptural structure with a green roof and a solar panel, situated in a paved plaza with trees and buildings in the background.







## QR CODES



## DOOR LIGHTS: N/S



## USB PORTS: N/S

# KEY FEATURES

The key features of this kiosk include the QR codes which allow for students to just scan and go on with their busy days, they can revisit the sites later when they have more time.

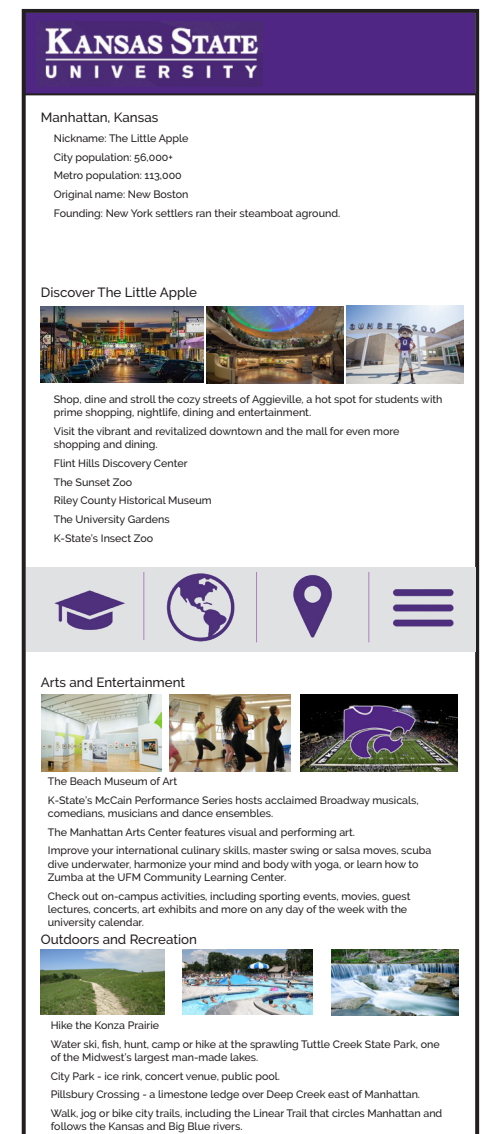
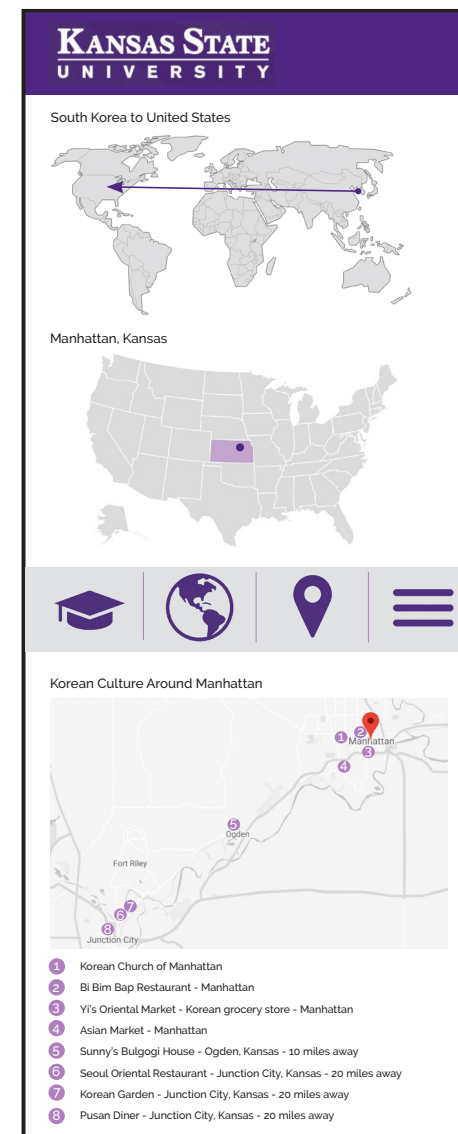
Then there are the door lights that are color changing, but the default is purple to represent Kansas State University's colors.

There are USB ports one both sides of the bench seating so that students can charge their devices while looking at the sites they just scanned or taking a break from their busy scedules.

Finally there is the interactive touchscreen, which anyone can use to look up information on K-State and the resources available if they do decide to go there.



## INTERACTIVE TOUCH SCREEN



# MATERIALS



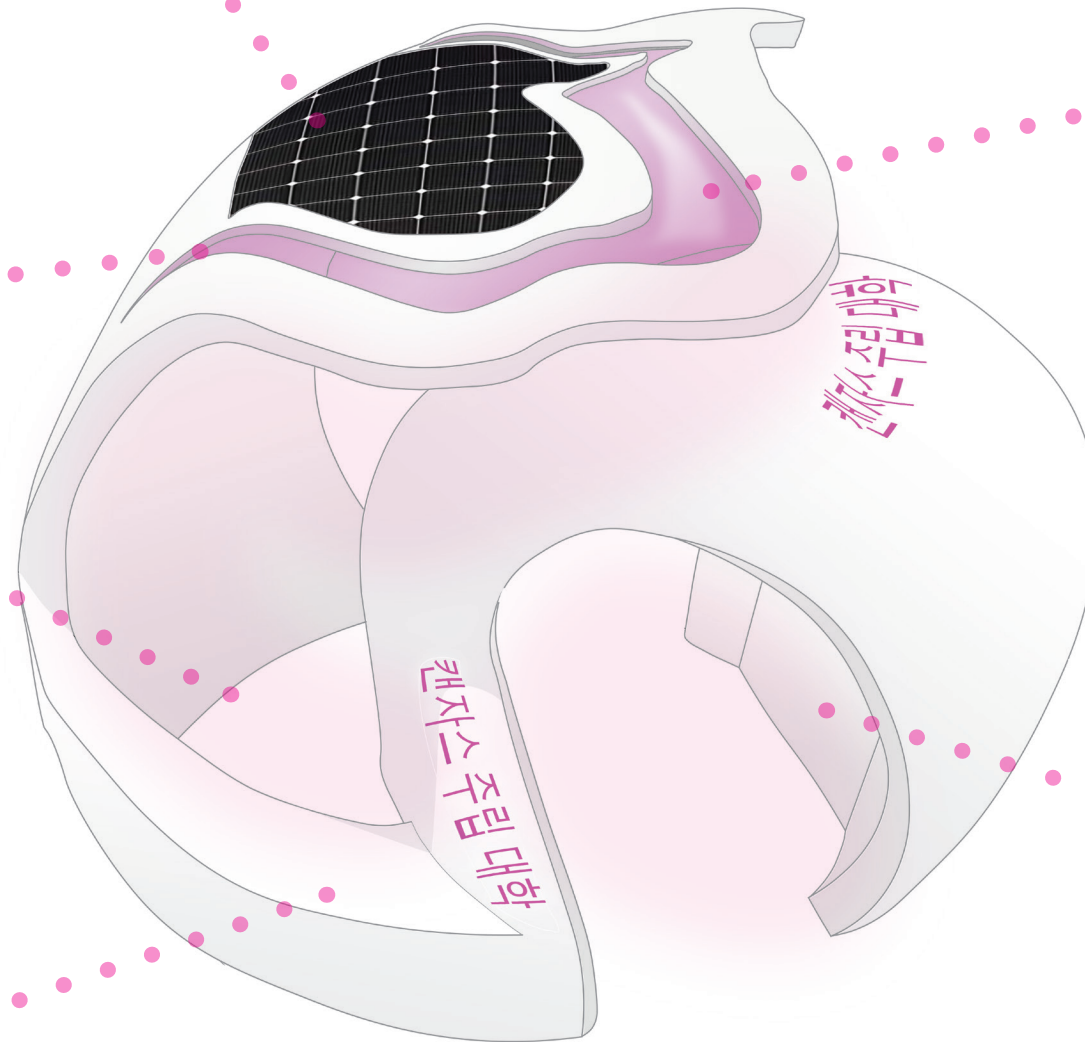
Thin Film Solar Panels



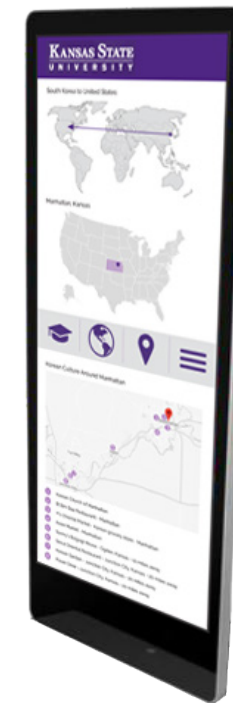
LED Strip Lights



Custom Formed, Durable Plastic Skin  
White Gloss



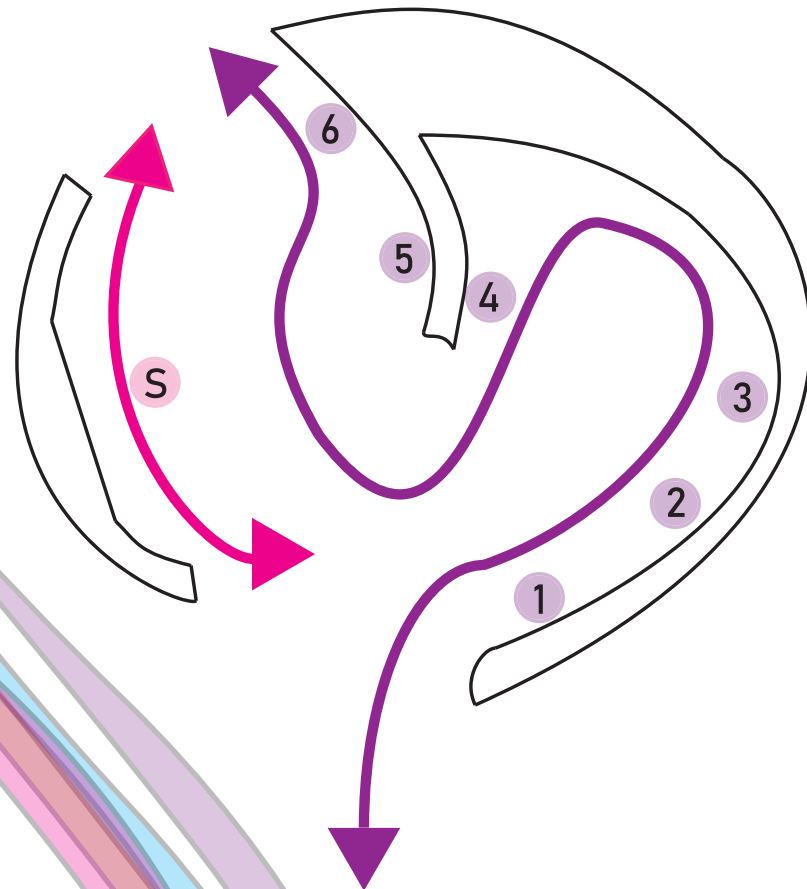
3-Form Varia,  
Clear Formable Resin Panels



Interactive Touchscreen

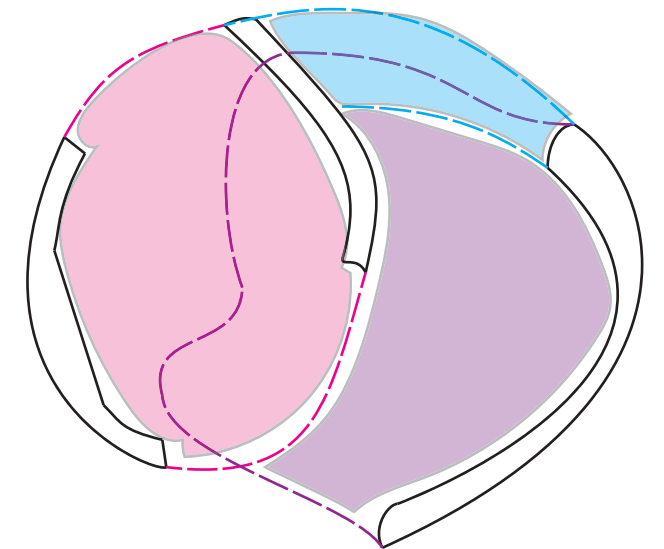
# DIAGRAMS

## CIRCULATION



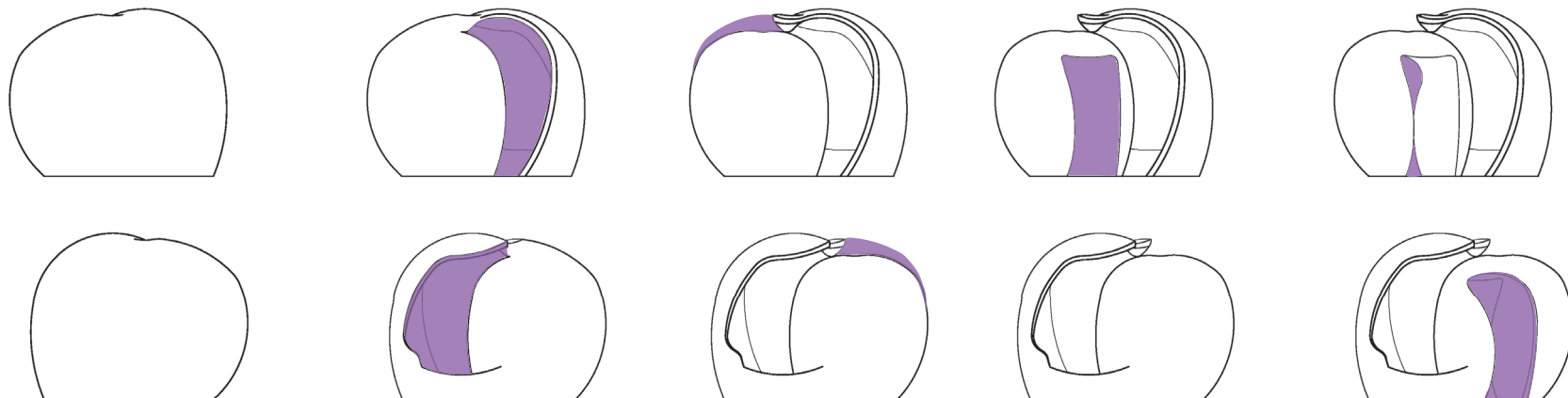
- 1 Kansas State Home Page
- 2 Academics and Programs
- 3 Student Life Page
- 4 International Student Home Page
- 5 Step-by-Step International Application
- 6 International Buddies Club
- S Interactive Touch Screen

## DEGREE OF ENCLOSURE



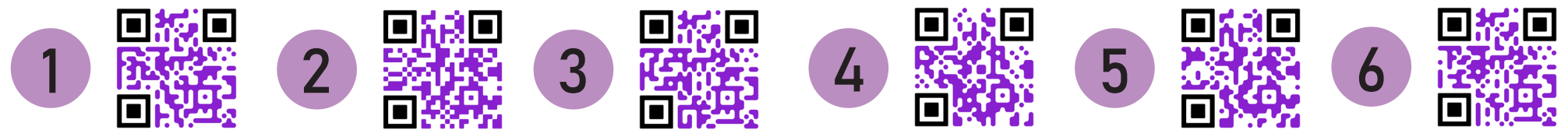
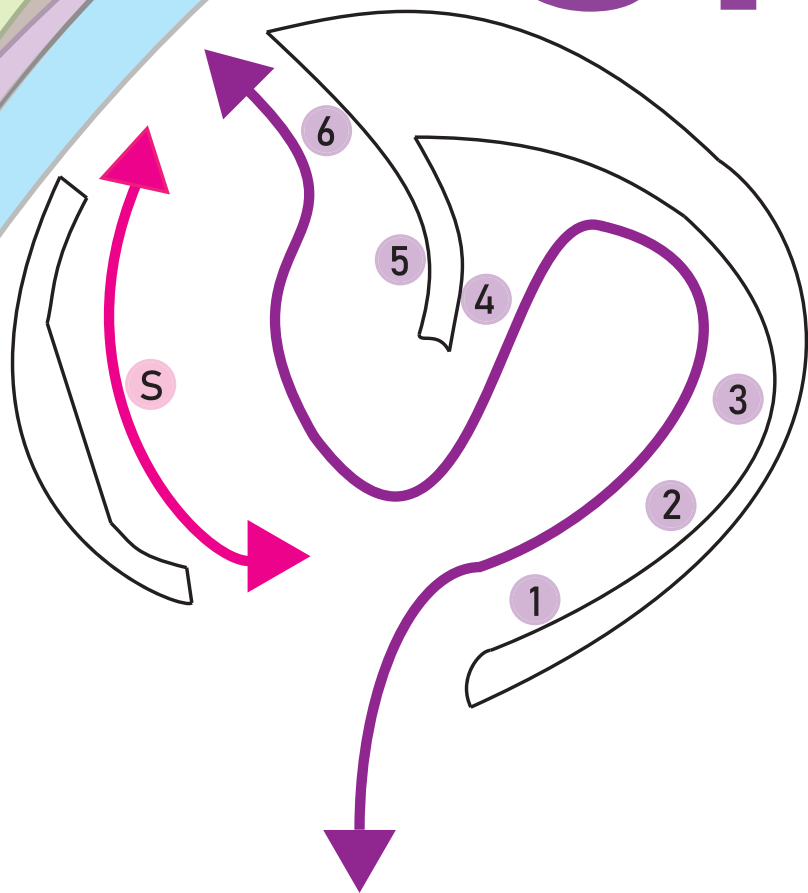
- Most Enclosed
- Less Enclosed
- No Enclosure

## SUBTRACTIVE TRANSFORMATION





# MARKETING STRATEGY



The first thing that will attract Inje students to the kiosk is the unique form and the color changing lights glowing from within. Lighting leads the way!

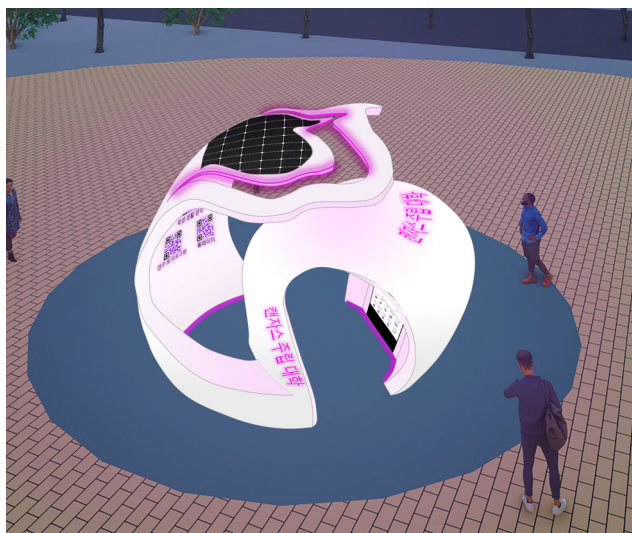
“Kansas State University” is also visible from 360 degrees around the kiosk.

Our research shows that South Korea is very technology based. 83% of South Korean youths are using social media daily, and South Koreans aged 16-66 use their cellphones 5 hours and 22 minutes per day on average.

With this in mind, we came up with a solution that is purely technological. There are no employees present at the kiosk. Everything is self service, the QR codes are sequenced and have labels underneath them, telling students what site they will be scanning. There is also an interactive touch screen if they prefer to use that or if they have an issue they are able to live chat with a virtual employee.

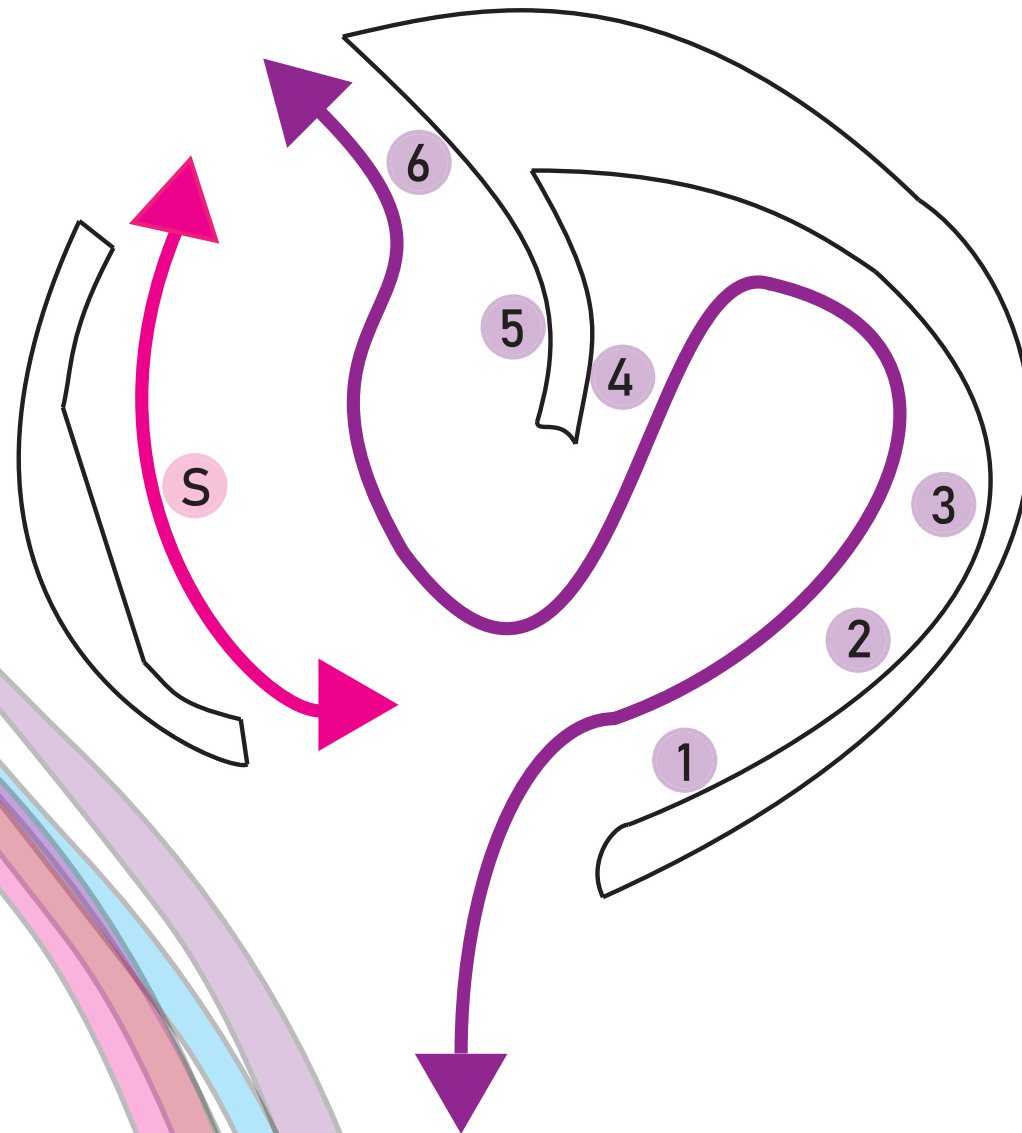
This location (Neulbit Hall) is one of high traffic, though usually when a student is on campus, it is to go to class or meet with people. We wanted to make the process of getting information quick and intuitive so as not to interrupt their busy schedules.

Our solution works with the flow of students schedules so they can quickly get information and access it at any time, and they'll never lose a pamphlet in their bags.



# QR CODES

## EXPERIENCE



1 Kansas State Home Page



2 Academics and Programs



3 Student Life Page



4 International Student Home Page



5 Step-by-Step International Application



6 International Buddies Club

S Interactive Touch Screen

The QR codes are a key component to the design of this kiosk. They are the pamphlets so to speak. They are the part of the kiosk that delivers information, along with the interactive touch screen.

QR codes allow for Inje students to have access to the information they need about Kansas State University any time they want for as long as they want, and it won't get lost in their back packs

# SELF-SERVICE

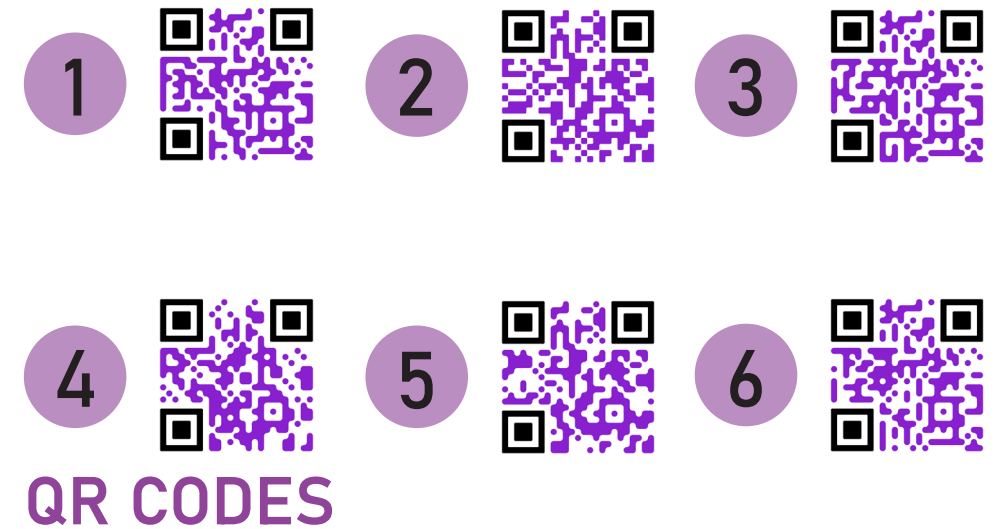
Perhaps the most important part of our design solution is the complete lack of employees or physical handouts. This was a choice made with the concept of fluidity in mind. Sometimes needing to stop and talk with someone can be tedious or may interrupt a students schedule, which means they may not stop to interact. This solution allows for students of Inje University to pass through the kiosk with minimal stopping and have the information they need at their fingertips for as long as they need, working with the flow of their day, not against it.

## USB PORTS

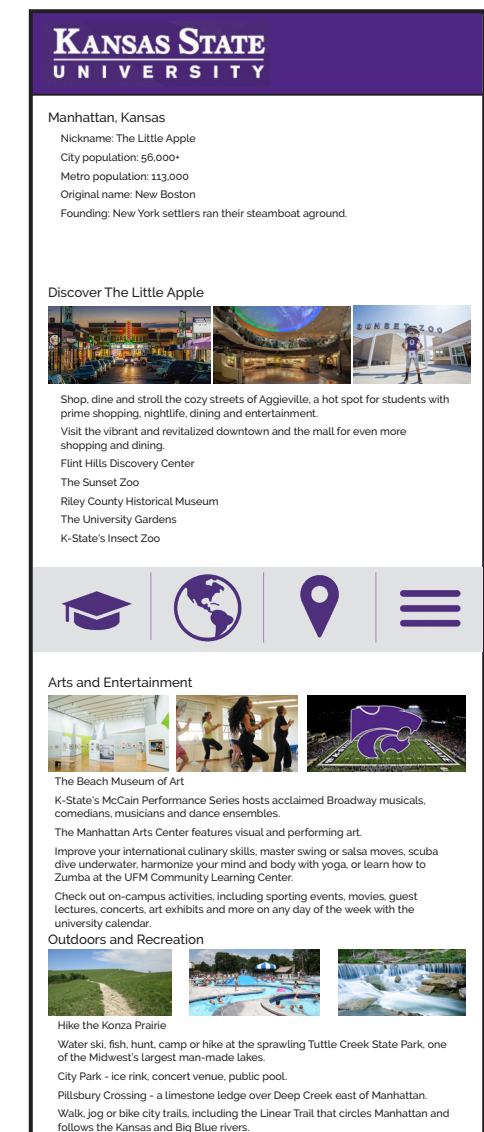
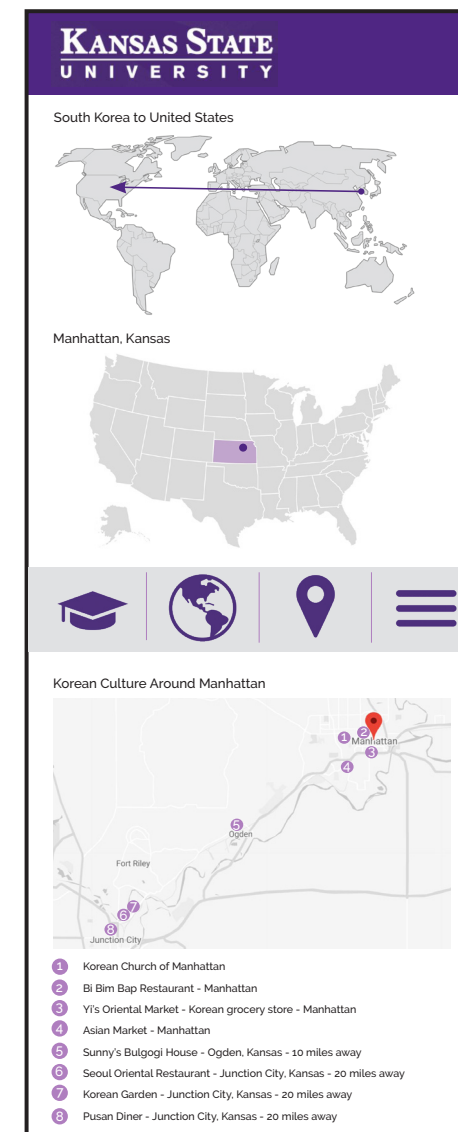
To address the concern a students phone may be dead, there are USB ports on both sides of the bench seating for them to charge their devices while checking out the websites the QR codes provided.

## LIVE CHAT

If any student ends up needing assistance, there is the option for live chatting with a K-State representative on the interactivetouch screen.



## QR CODES



## INTERACTIVE TOUCH SCREEN



# DECONSTRUCTION

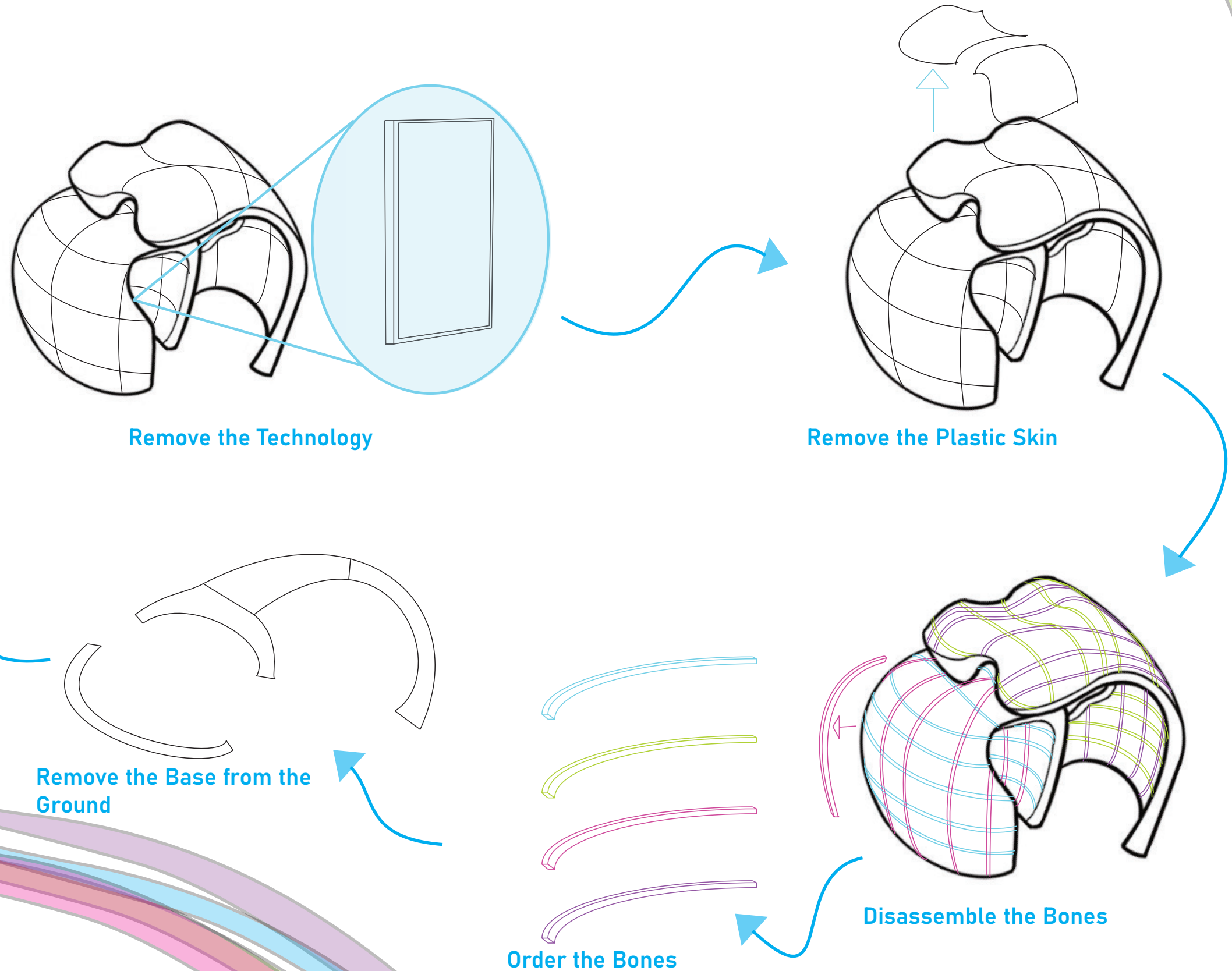
**STEP ONE:** Remove technology from kiosk, this includes the interactive screen and the drawer under the bench.

**STEP TWO:** Remove the plastic skin from the metal frame. These are all coded by letters and numbers.

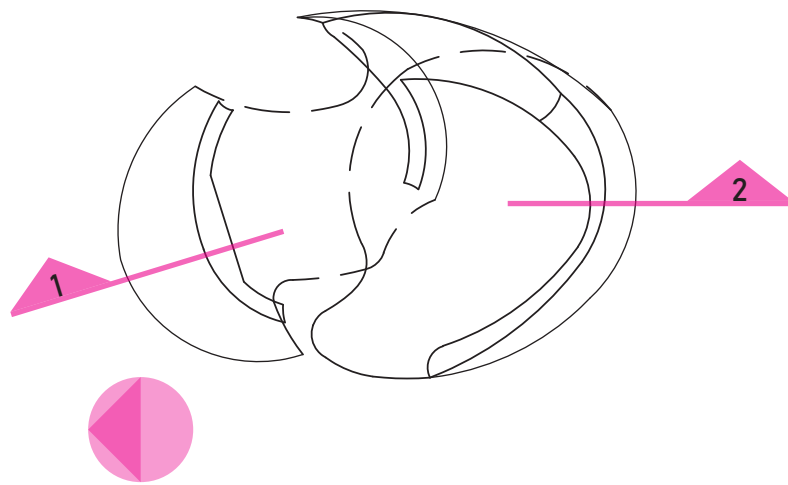
**STEP THREE:** Take apart the metal frame (bones). These are also coded by letters and numbers indicating where they go.

**STEP FOUR:** Take apart the base, there are 4 sections that are bolted into the ground in pre-drilled holes at the site.

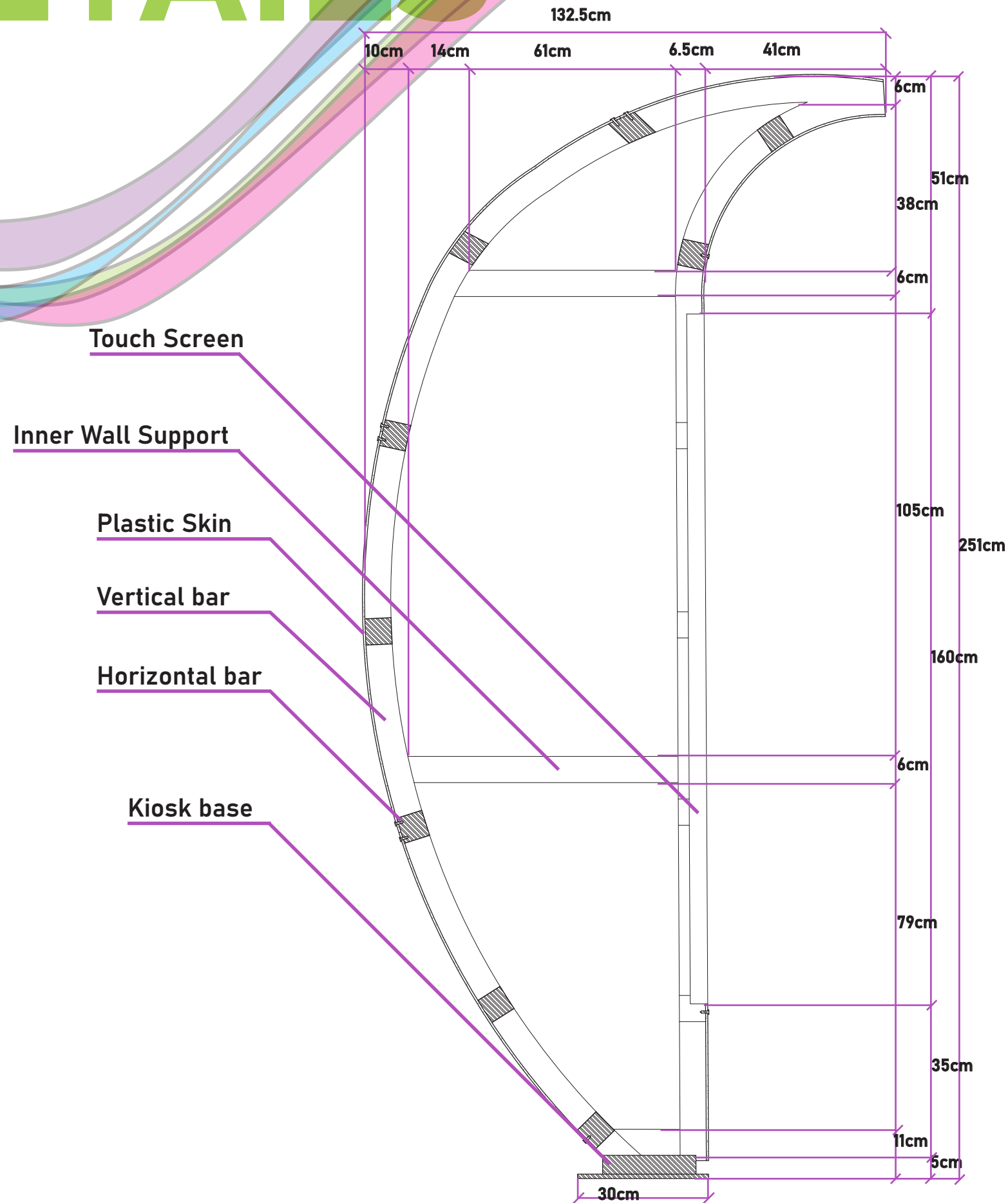
**STEP FIVE:** Load the truck!



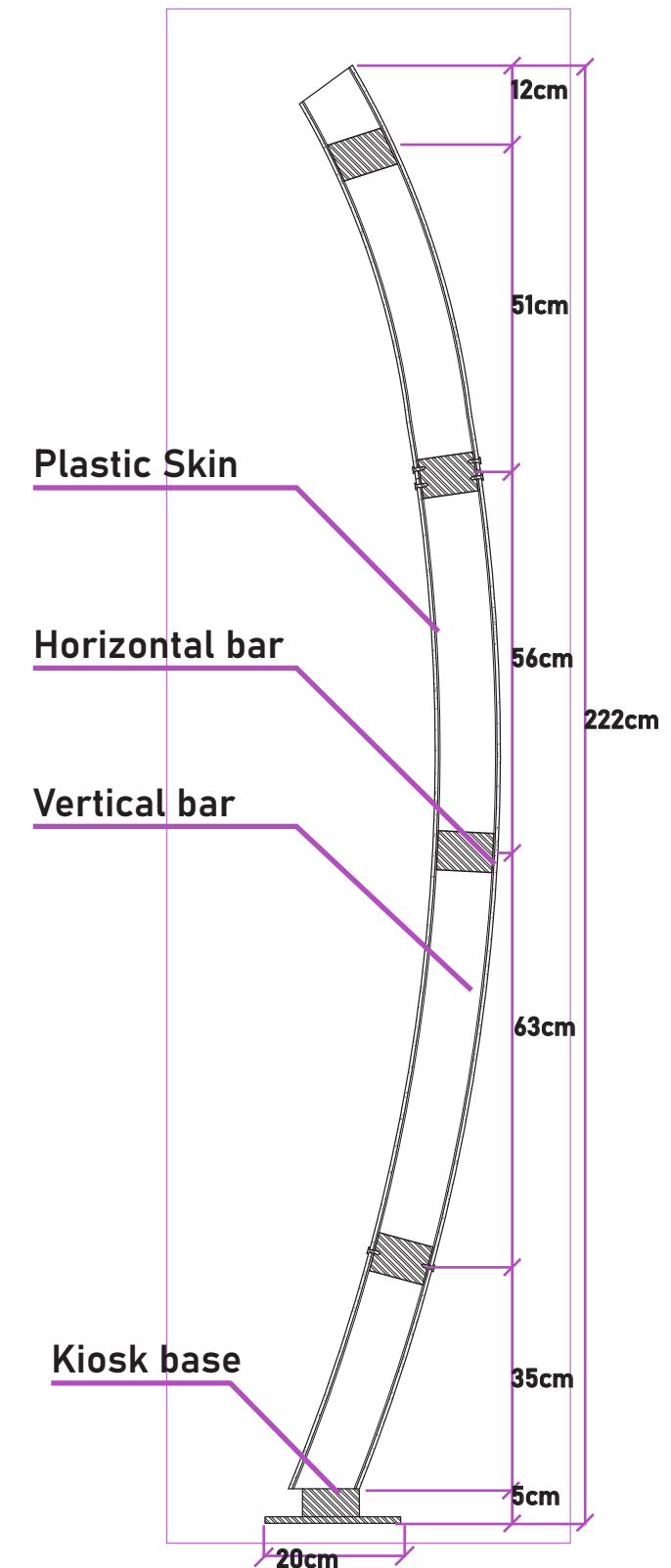
# DETAILS



These details show there are two kinds of walls in the kiosk. The screen wall is the only different kind of wall, due it's flat surface, the bow out of the wall needs to be supported. The other walls are consistent in their thickness throughout.

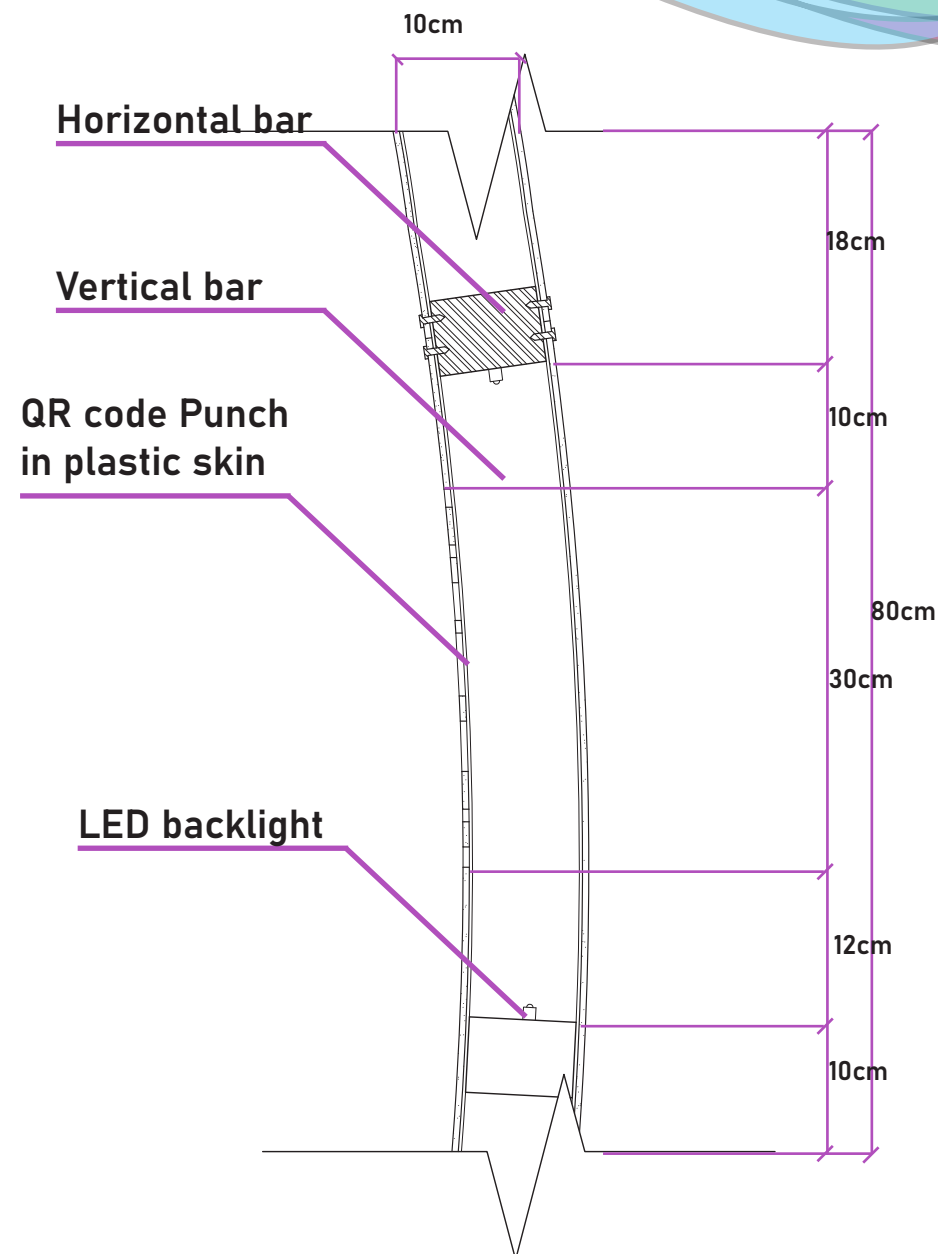


1 SCREEN WALL DETAIL: N/S



2 WALL DETAIL: N/S

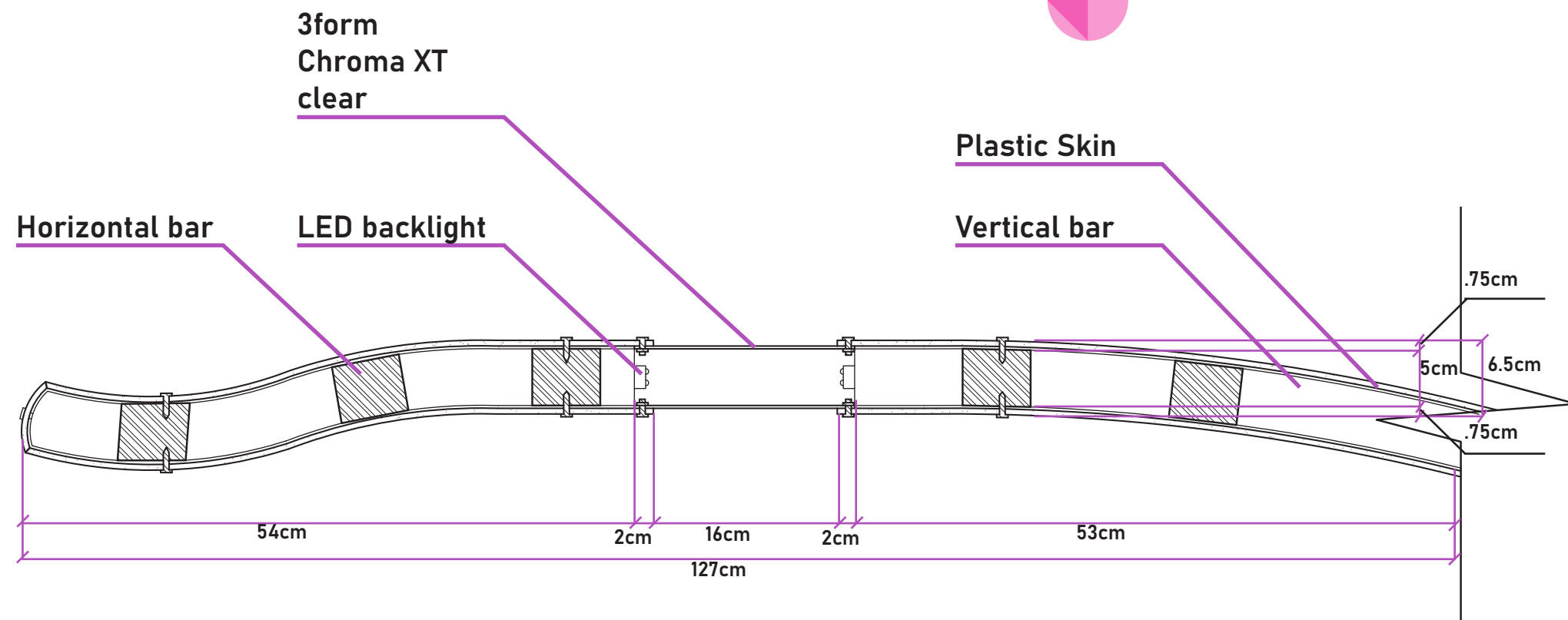
# DETAILS



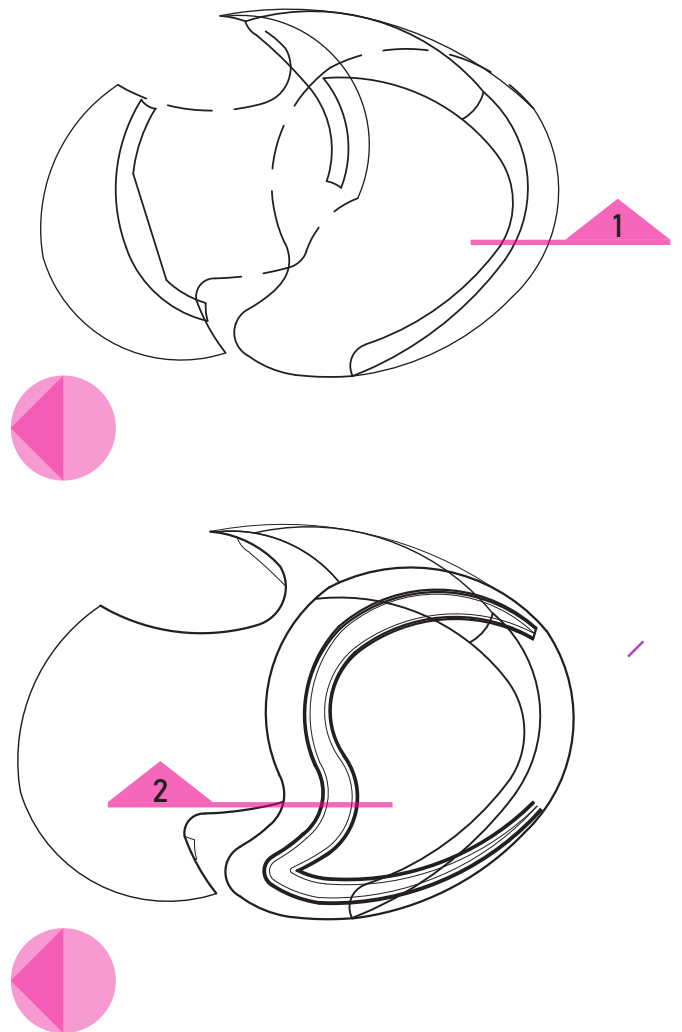
1 QR CODE DETAIL: N/S

These details show some key features of the kiosk. The skylight is shown here, and it's assembly is outlined.

The QR codes are punched holes in the plastic skin, as shown in the detail and they are backlit so even at night they can be scanned.

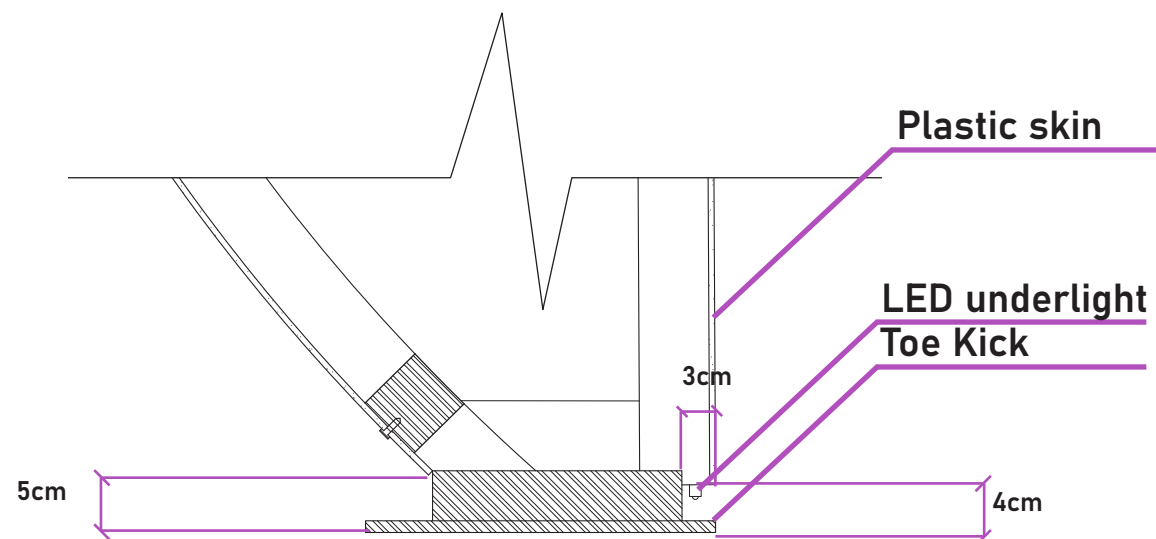


2 SKYLIGHT DETAIL: N/S

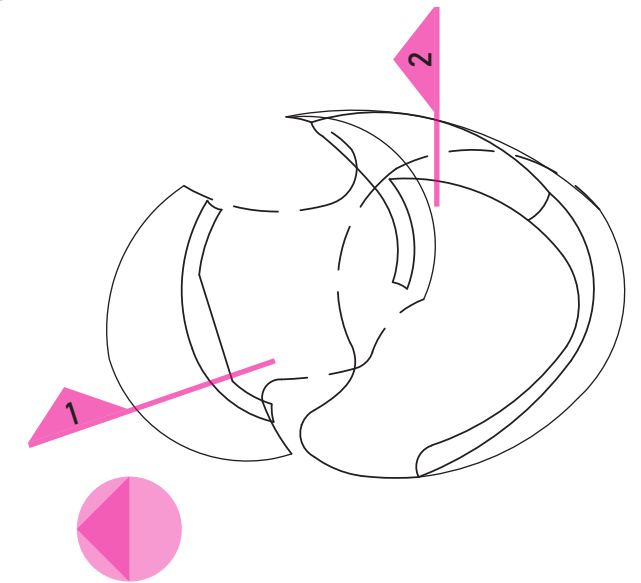


# DETAILS

The underlight in the toe kick casts a glow around the base interior perimeter of the kiosk, lighting the floor while also spiking intrigue.

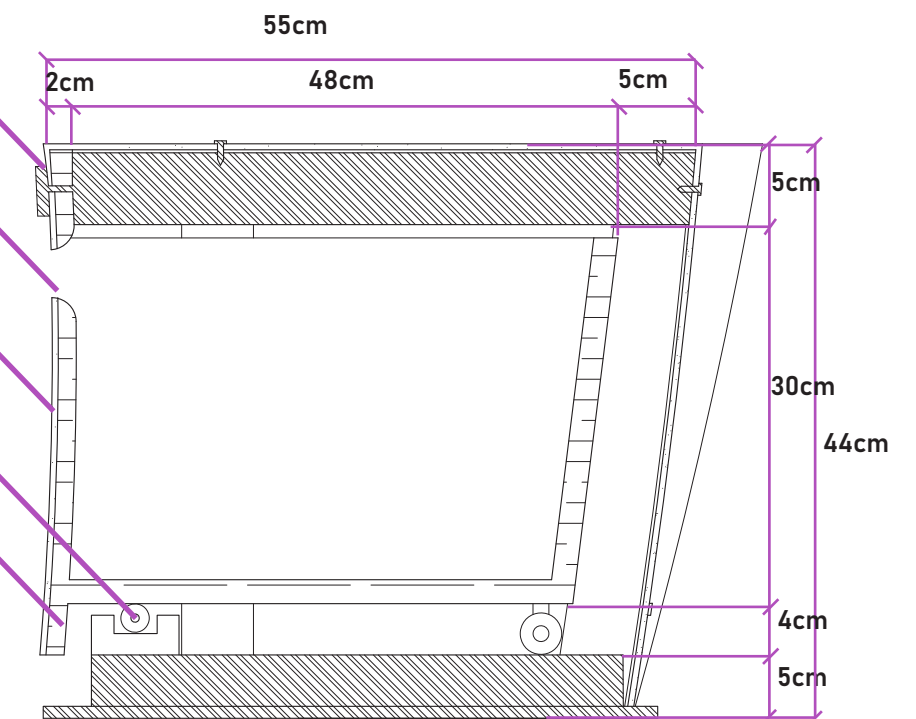


2 UNDERLIGHT DETAIL: N/S



The drawer holds the batteries charged by the solar panels. These batteries are connected through a series of plugs that lace through the metal frame. They also power the USB ports in the bench.

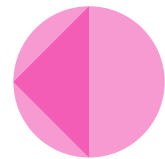
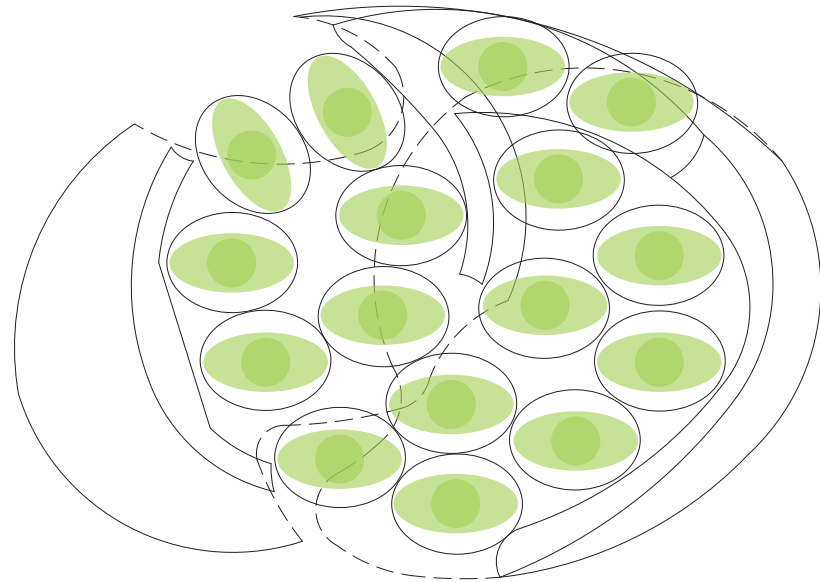
Lock  
No-hardware handle  
Plastic Skin  
Roller system  
Wood drawer



2 BENCH DRAWER DETAIL: N/S



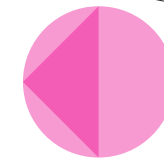
# ANTHROPOMETRICS



## TOUCH ZONE

Shoulder breadth of the average korean is 61cm and a depth of 46cm. This is about 0.28 square meters per person.

The total area of our kiosk is 45,730 sq cm which roughly is about 4.6 sq meters. This means that there can be 16 people in our kiosk shoulder to shoulder.



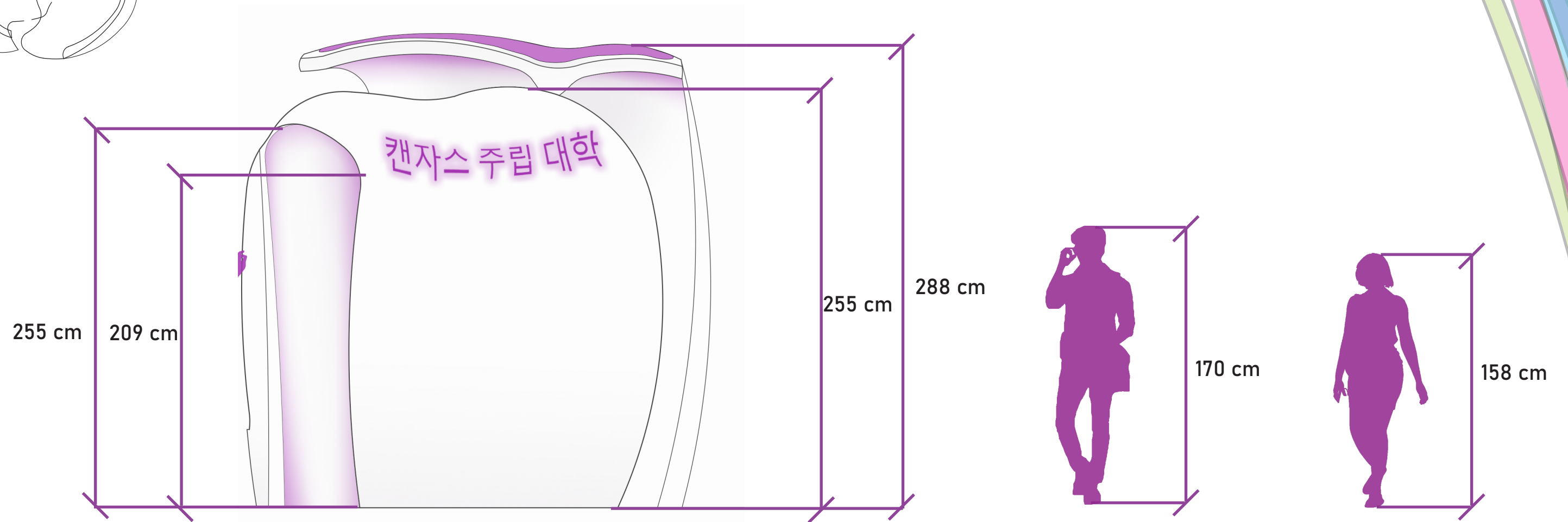
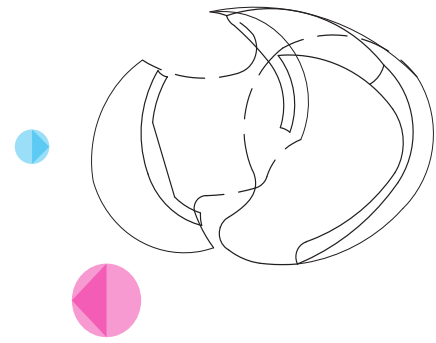
## CIRCULATION

110 sq cm or 1.10 sq meters provides individuals with enough space for circulation without bumping into one another.

The total area of our kiosk is 45,730 sq cm which roughly is about 4.6 sq meters. This means that there can be approximately 4 people in our kiosk at a time.

## PROXEMICS

# ANTHROPOMETRICS



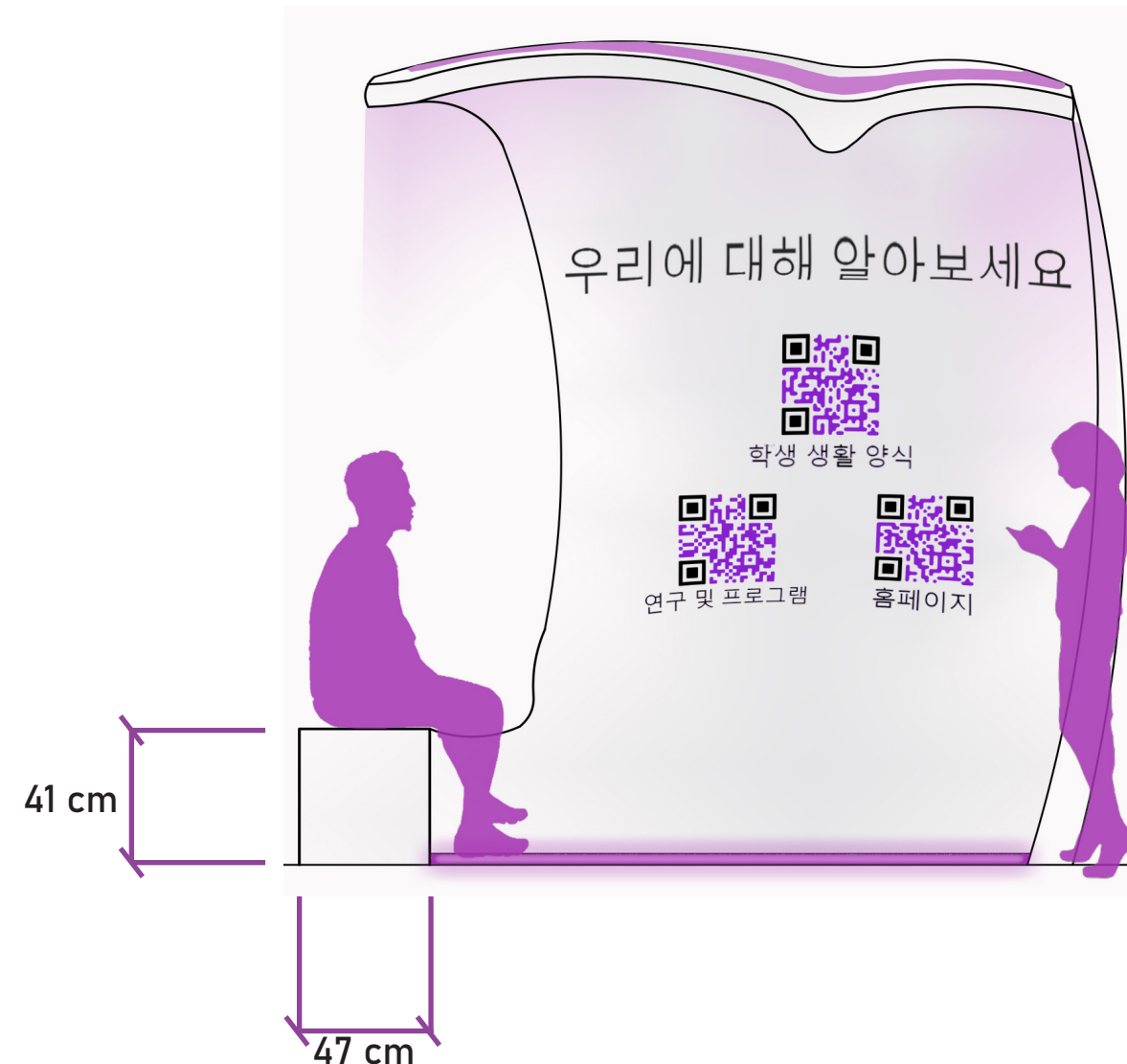
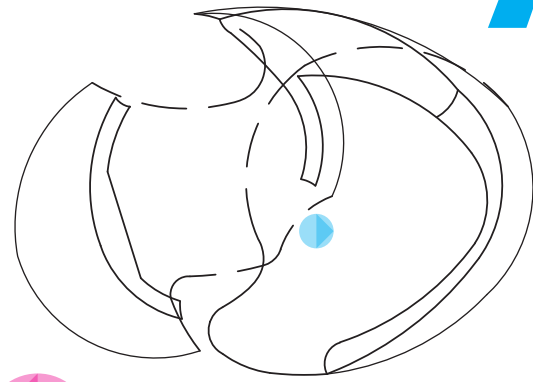
KOREAN MALE AVG STATURE: 170cm  
KOREAN FEMALE AVG STATURE: 158CM

The overhead clearance is a minimum of 203cm

Our kiosk meets all the requirements for heights of doors and overhangs.  
There is no need for adjustments.

## STATURE

# ANTHROPOMETRICS



## BUTTOCKS POPLITEAL LENGTH

KOREAN MALE AVG BUTTOCK POPLITEAL

DEPTH: 47 cm

KOREAN FEMALE AVG BUTTOCK POPLITEAL

DEPTH: 44.9 cm

Horizontal distance of 47 cm for adequate seating depth from the hollow of the knee to the rearmost point of the buttock.

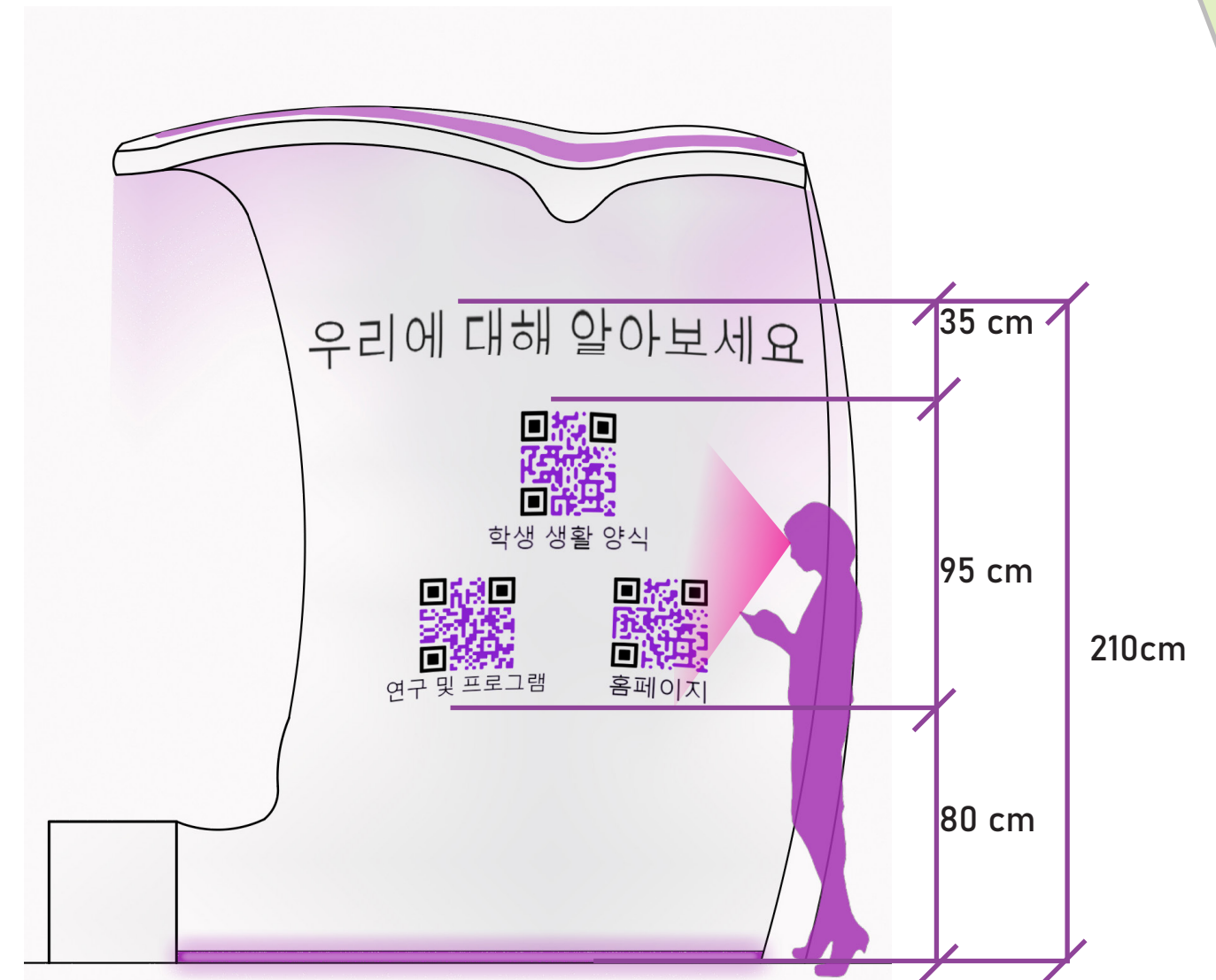
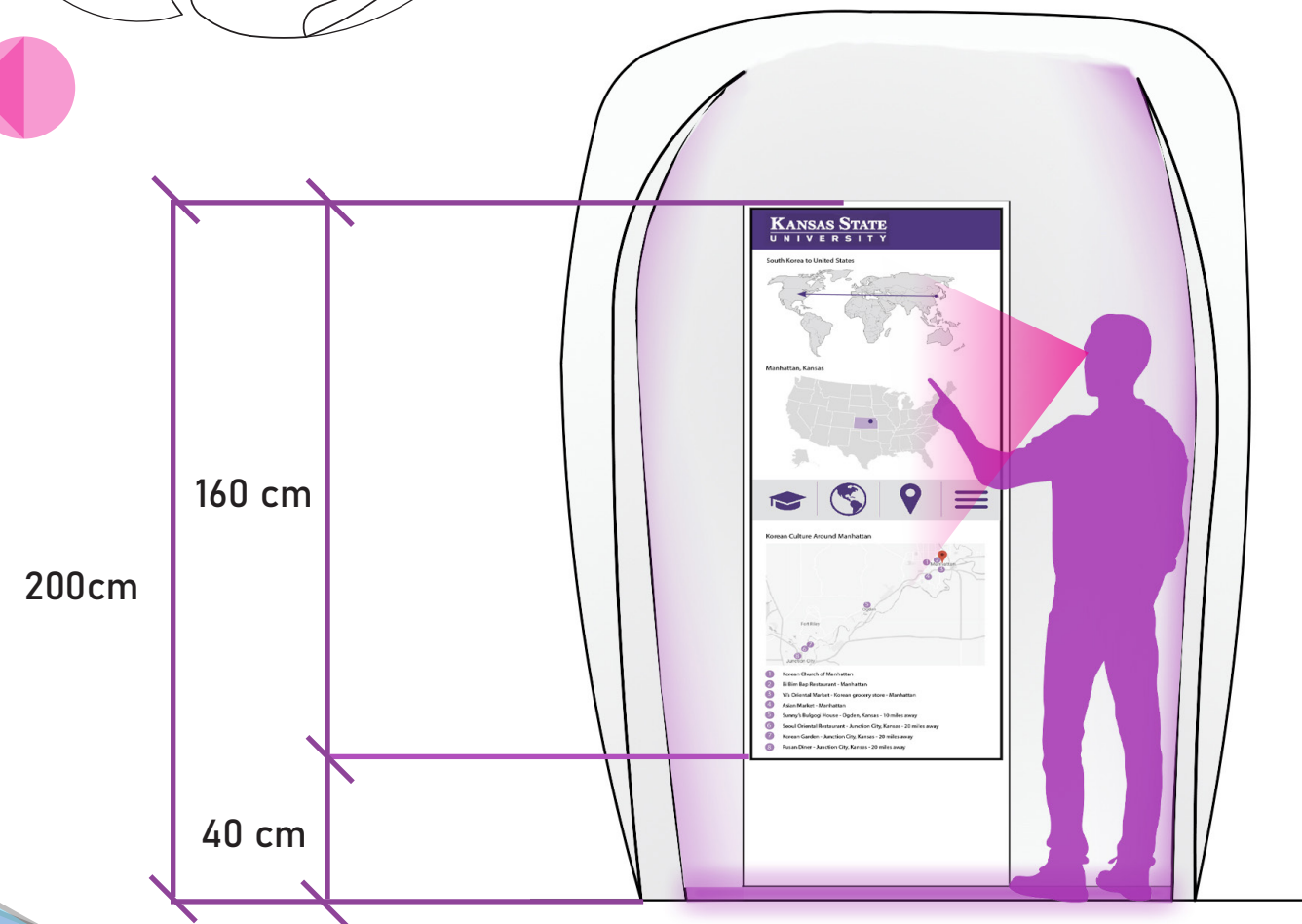
## POPLITEAL HEIGHT

KOREAN MALE AVG POPLITEAL HEIGHT: 41 cm

KOREAN FEMALE AVG POPLITEAL HEIGHT: 38.4 cm

Height of bench has a vertical distance of 41 cm from the foot-rest surface to the lower surface of the thigh behind the knee, providing legs bent comfortably at a right angle.

# POPLITEALS



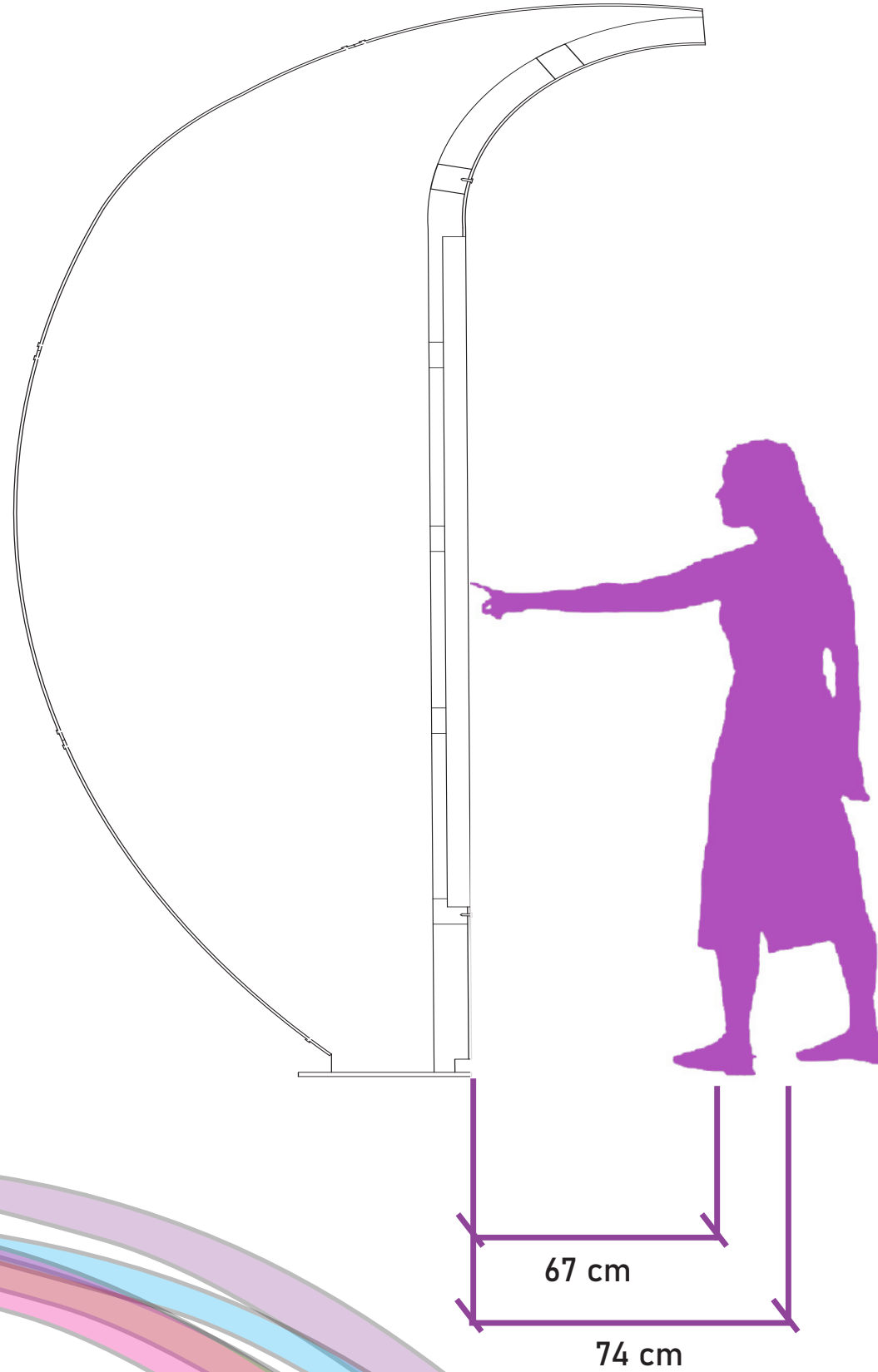
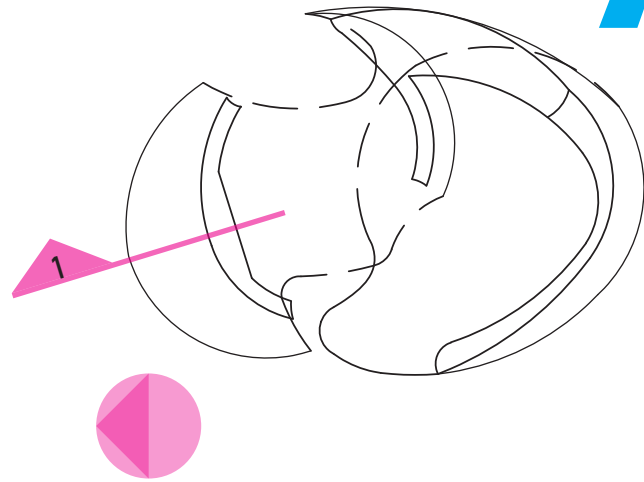
The screens information should be displayed within the comfortable range of eye level, between 120cm and 170cm. We decided to accommodate for potential wheelchair users as well and made the screen accessible below 120cm. Most of the important information will be in the center of the screen.

The QR codes should also be within that range. though they can be lower because people will scan them with their phones which can be done at waist level.

# LINE OF SIGHT



# ANTHROPOMETRICS



KOREAN MALE AVG THUMB TIP REACH: 67 cm  
KOREAN FEMALE AVG THUMB TIP REACH: 74 cm

Distance from the wall to the tip of the thumb measured with the subject's shoulder against the wall, arm extended forward, and the index finger touching the tip of the thumb.

5th percentile data helped us consider where controls were placed throughout the kiosk.

## THUMB TIP REACH