Developing an Interactive Campus Navigation Kiosk for EVSU Ormoc

Research Design Rationale

The primary goal of developing an Interactive Campus Navigation Kiosk for EVSU Ormoc is to address navigational difficulties, enhance administrative efficiency, and improve the overall visitor experience. To achieve this, a qualitative research design is appropriate as it allows for an in-depth exploration of the experiences, needs, and expectations of various stakeholders. This approach will provide valuable insights into the design and implementation process, ensuring the kiosk meets the specific needs of its users.

Methods

1. Interviews:

- **Participants:** Sample of students, visitors, and security personnel.
- **Purpose:** To gather detailed insights into the current challenges faced in navigating the campus and the anticipated benefits of the interactive kiosk.
- **Procedure:** Semi-structured interviews will be conducted to allow flexibility in exploring different aspects while ensuring consistency in the core questions asked across all interviews.

2. Document Analysis:

- **Sources:** Existing campus site development model
- **Purpose:** To understand the development model and how the site map was structured in order to evaluate how the new navigation kiosk will be developed.
- **Procedure:** Relevant documents will be collected and analyzed to identify patterns and gaps in the current navigation tools.

This design will ensure a comprehensive understanding of the requirements and potential impact of the Interactive Campus Navigation Kiosk, leading to a well-informed development process that aligns with the needs of EVSU Ormoc's campus community.

Ethical Considerations

1. **Informed Consent**:

Process: All participants will be provided with an information sheet detailing the study's purpose, procedures, potential risks, and benefits. Consent forms will be obtained prior to participation.

Confidentiality: Participants will be assured that their responses will be kept confidential and used only for the purposes of this study.

2. Anonymity:

Measures: Participants identities will be anonymized in the data analysis and reporting stages. Codes or pseudonyms will be used instead of real names to ensure privacy.

3. Voluntary Participation:

Assurance: Participation in the study will be entirely voluntary, and participants will have the right to withdraw at any time without any negative consequences.

4. Risk Minimization:

Assessment: The study will be designed to minimize any potential risks to participants, including psychological discomfort or stress. Sensitive topics will be approached with care, and participants will have the option to skip questions or terminate the interview if they feel uncomfortable.

5. **Data Security:**

Protocol: All data collected will be stored securely, with digital files protected by passwords and physical documents kept in a locked cabinet. Only the research team will have access to the data.

6. **Ethical Approval:**

Procedure: The research plan will be submitted to the institutional review board (IRB) or ethics committee for approval before data collection begins to ensure compliance with ethical standards.

Semi-Structured Interview Questions

By asking these questions, the research aims to gather comprehensive insights from various stakeholders, ensuring that the campus navigation kiosk system is designed and implemented to meet the needs and expectations of all the users involved.

Student Respondent 1

- What year are you currently in (e.g., 1st year, 2nd year, etc.)?
  SR1: coming third year na
  Translation:
    "In coming third year already"
- How would you describe your experience in locating different offices and facilities on campus since you started here? Have you faced any difficulties or challenges?
  SR1: sa first nako ari nag libog jud ko kay ang facility lagyo kada facility is naay for students lang nag lisod ko. nangutana sa students og sa guard.
  Translation:
  "At first, I was really confused because the facilities are far apart, and each facility has a separate one for students only. This made it difficult for me to navigate. I had to ask the students and the guard for help."
- Can you provide examples of specific instances where you had trouble finding a particular office or facility? What were the main issues you encountered?

- What resources or tools (e.g., maps, signage, online directories) have you seen and used to navigate the campus? How effective have these resources been for you?
  SR1: naa parehas anang label sa kada door sa room.

Translation:
"there is a label on each door of the room"

- What improvements or changes would you suggest to make it easier for students to find their way around the campus? Are there any specific features or resources you believe would be helpful?
  SR1: dapat naay map nga klaro.
  Translation:
  "there should be a clear map"

- Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.
  SR1: No
  Translation:
  "No"

- What are your thoughts on having an interactive kiosk navigation system on campus?
  SR1: ahw oks kaayo og e implement kay mas sayon ang pag locate basta ma sabtan lang ang instruction.
  Translate:
  "Oh, it would be very good to implement because it will be easier to locate as long as the instructions are understood."

- How do you think an interactive kiosk navigation system could impact your overall campus experience? What features do you believe would be most beneficial for such a system to include?
  SR1: dapat ang mga basic english gamiton para dli sayon sabton.
  Translation:
  "Basic English should be used so that it is not difficult to understand."

Student Respondent 2

- What year are you currently in (e.g., 1st year, 2nd year, etc.)?
  SR2: 3rd year BSED SCIENCE.
  Translation:
  "A 3rd year BSED Science"

- How would you describe your experience in locating different offices and facilities on campus since you started here? Have you faced any difficulties or challenges?
  SR2:kadtong pag sugod jud nag libog jud ko kay naay building nga lahi gani siya og label education siya niya wala pa siya na update so naglibog ko ato at first pero pila ka months nakasweto nasad nua ko.
  Translation:
  "At the beginning, I was really confused because there was a building labeled 'Education' that hadn't been updated, so it was misleading. However, after a few months, I became familiar with it."

- Can you provide examples of specific instances where you had trouble finding a particular office or facility? What were the main issues you encountered?

- What resources or tools (e.g., maps, signage, online directories) have you seen and used to navigate the campus? How effective have these resources been for you?

SR2: Yes, like ang bulletin board pero sometimes makalimot namn gud ta kay naa naman juy social media so mao ng makalimot nas bulletin board. So far mangutana rakos guard or other students.
Translation:
"Yes, like the bulletin board, but sometimes we forget about it because we rely on social media. So, I often ask the guard or other students instead."

- What improvements or changes would you suggest to make it easier for students to find their way around the campus? Are there any specific features or resources you believe would be helpful?
SR2: dapat ang kada classroom updated ang mga label kay para ma inform ang student dli mag libog maayo sad og naay signage kung asa ang kada department.
Translation:
"The labels in each classroom should be updated to inform students and prevent confusion. It would also be helpful to have signage indicating the location of each department."

- Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.
SR2: wala pa
Translation:
"No"

- What are your thoughts on having an interactive kiosk navigation system on campus?
SR2:much easier siyas student kay anad man og technology pero kinahanglan siya og naay mag guide kay di baya tanan anad sa technology or advancement.
Translation:
"It would be much easier for students since they are accustomed to technology. However, guidance is still needed because not everyone is familiar with technological advancements."

- How do you think an interactive kiosk navigation system could impact your overall campus experience? What features do you believe would be most beneficial for such a system to include?
SR2: oo, dapat sayon ra siya masabtan
Translation:
"Yes, it should be easy to understand."

Student Respondent 3

- What year are you currently in (e.g., 1st year, 2nd year, etc.)?
SR3: 2 years na pero ang first year namo online
Translation:
"It's been 2 years, but our first year was online."

- How would you describe your experience in locating different offices and facilities on campus since you started here? Have you faced any difficulties or challenges?
SR3:nag libog mi kay naay suok suok ari niya wala mi kabalo sa kung asa ang mga department ma locate unlike sa highschool kay dali ra dri sa evsu kay pa ilogay na og classroom so lisod jud siya e locate.
Translation:
"We were confused because there are many corners here, and we don't know where to locate the departments. Unlike in high school, where everything was easy to find, at EVSU the classrooms are scattered, making it difficult to locate them."

- Can you provide examples of specific instances where you had trouble finding a particular office or facility? What were the main issues you encountered?
  SR3: masaag ghapon kay atong nag team building then naay nag game ato naay luagar naglibog mi asa dapit wala juy sakto nga guide ba or direction nga maka tabang sa student.
  Translation:
  "We still got lost, like during our team-building activity there was a game area, and we were confused about its location. There wasn't a proper guide or direction to assist students."
- What resources or tools (e.g., maps, signage, online directories) have you seen and used to navigate the campus? How effective have these resources been for you?
  SR3: wala koy ge gamit mangutana rako.
  Translation:
  "I didn't use any guides; I just asked around."
- What improvements or changes would you suggest to make it easier for students to find their way around the campus? Are there any specific features or resources you believe would be helpful?
  SR3:mas okay og e improve ang bulletin board kanang mas ma organize siya ba naay saktong guide kay basig mangutana ka niya yagayagaan ka nua.
  Translation:*"It would be better to improve the bulletin board, making it more organized with accurate guides. This way, if you need to ask for directions, you won't get lost."*

- Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.
  SR3: wala pasad
  Translation:
  "Not yet"
- What are your thoughts on having an interactive kiosk navigation system on campus?
  SR3: nice siya og ma implement na siya, og ma implement gani na siya dapat naa juy saktong instruction kay dli tanan engage sa technology.
  Translation:
  "It would be great if it gets implemented. When it does, there should be clear instructions because not everyone is engaged with technology."

- How do you think an interactive kiosk navigation system could impact your overall campus experience? What features do you believe would be most beneficial for such a system to include?
  SR3:dapat naa juy saktong instruction kay dli tanan engage sa technology.
  Translation:
  "There should be clear instructions because not everyone is engaged with technology."

Student Respondent 4

- What year are you currently in (e.g., 1st year, 2nd year, etc.)?
  SR4: 3rd year
  Translation:
  "3rd year"

- How would you describe your experience in locating different offices and facilities on campus since you started here? Have you faced any difficulties or challenges?
  SR4: at first lisud siya since like di paman kaayo nako know ang place and then lisud pa ilocate labaw na if asa dapit ang cashier na part since pag enrollment kay needed baya then registrar and then offices sab
  Translation:
  "At first, it was difficult because I wasn't very familiar with the place yet. It was hard to locate things, especially the cashier's office, which is needed during enrollment, as well as the registrar and other offices."
- Can you provide examples of specific instances where you had trouble finding a particular office or facility? What were the main issues you encountered?
  SR4: mao to ako gimention ganina labaw na if naay permahanan na needed then buwag buwag baya ang mga building sa registrar ug cashier before so lisud pa para nako, though karon nagtapad naman sila, but naay instances na kanang kaila gud nga magpauban ug enrollment then wa kayko kabalo sa uban offices sa other department magpangita pami
  Translation:
  "That's what I mentioned earlier, especially when there are signatures needed and the registrar and cashier offices were separated before, so it was difficult for me. Although now they are next to each other, there are still instances where someone familiar needs to accompany you for enrollment, and I don't know where the other offices in other departments are, so we still end up looking for them."
- What resources or tools (e.g., maps, signage, online directories) have you seen and used to navigate the campus? How effective have these resources been for you?
  SR4: umm naa koy nakit an nga map para sa evsu mas prefer nako mangutana nalng sa other student na kahibaw. Wala man nua koy na bantayan nga signage pero ambot lang kay dli man sad gud ko magkita kita sa lugar mao rato ako na bantayan ang map pag enter nimos campus naas bulletin ma ingon nako nga effective siya pero hasul.
  Translation:
  "I found a map for EVSU, but I prefer to ask other students who know the place. I haven't noticed any signage, but maybe it's because I don't really get to see the place much. What I did notice was the map on the bulletin when you enter the campus. I would say it's effective, but it's still a hassle."

- What improvements or changes would you suggest to make it easier for students to find their way around the campus? Are there any specific features or resources you believe would be helpful?
  SR4: umm like interactive nga map or something nga manavigate nila ila destination
  Translation:
  "Um, like an interactive map or something that can help them navigate to their destination."
- Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.
  SR4: sa mall naka suway ko like sa mga dagko nga mall for me usable siya pero mas maayo og mag implement og interactive nga kiosk sa campus.
  Translation:
  "I've experienced this in the mall for me, it's useful. But it would be better if an interactive kiosk were implemented on campus."
- What are your thoughts on having an interactive kiosk navigation system on campus?
  SR4: mas maayo since interactive siya murag maka help siya sa student ba para mas easy sa ila ma locate ang specific facility for example sa registrar og cashier.

Translation:
"It would be better since it's interactive; it seems like it could help students find specific facilities more easily, such as the registrar and cashier."

- How do you think an interactive kiosk navigation system could impact your overall campus experience? What features do you believe would be most beneficial for such a system to include?
  SR4: mas ma padli nua siya pero ok nas akoa kay dugay namn ko ari mas magamit na siya sa mga freshman. Maybe it should be user friendly kay dli tanan techy mas maayo siya og user friendly kay naa siyay step by step on how to use kiosk.
  Translation:
  "It would make things easier, but it's okay for me because I've been here for a while. It would be more useful for freshmen. Maybe it should be user-friendly because not everyone is tech-savvy. It would be better if it had a step-by-step guide on how to use the kiosk."

Security Personnel Respondent 1

- How long have you been working as a security personnel at EVSU Ormoc Campus? Please specify the number of months or years.
  GPR1: months palang nag sugod ko ari feb 1 2024.
  Translation: It's been months since February 1, 2024.
- Have you frequently been asked by students, staff, or visitors for directions to specific facilities on campus? If so, can you provide examples of the most common requests?
  GPR1: Ouh nay daghan mga dli lang kay lima. Kasagaran gyud mga visitor mag kuha og TOR. Naa pud kanang mangutana asa ang mga teacher office.
  Translation:
  "There are quite a few, more than five. Most visitors typically request a Transcript of Records (TOR). Some also ask where the teachers' offices are located, especially students."
- Are there situations where you have had difficulty locating certain facilities or providing accurate directions? Can you describe any specific instances where you were unsure of the location of a facility?
  GPR1: Ouh kay nag familiarize paman sad mi.
  Translation:
  "At first, since I still need to familiarize myself with the place."
- What resources or tools do you currently use to assist with navigation on campus? Are there any additional tools or improvements that you believe would help you in providing better assistance?
  GPR1: naa kanang kung asa ang parkinganan ge tunga siya sa faculty ug student nga parkinganan. Naa sad kanang bulletin board.
  Translation:
  "There is for example when someone asks about the parking area, which is located between the faculty and student parking lots. Also there is also a bulletin board."
- From your perspective, what improvements could be made to the current navigation and signage system on campus to enhance your ability to assist individuals effectively?
  GPR1: naa kanang signage kay naay student nga mo sulod sa right bisag bawal sila about nis parkinganan.
  Translation:
  "Yes, for example, when a student enters and parks in an incorrect parking area."

- Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.
  GPR1: Wala pa
  Translation:
  "Not yet"
- What are your thoughts on having an interactive kiosk navigation system on campus?
  GPR1: Ok ra para makahibaw sad ko
  Translation:
  "It's okay, just so I can learn as well."
- How do you think an interactive kiosk navigation system could impact your role and the overall campus experience for students, staff, and visitors? What features do you believe would be most beneficial for such a system to include?
  GPR1: Okay siya. Wala koy ma suggest
  Translation:
  "It's okay. I don't have any suggestion"

Visitor Respondent 1

- Is this your first visit to EVSU Ormoc Campus, or have you visited before? If you have visited before, have you noticed any changes in the navigation aids or signage?
  VR1: Dili una kadtong pag take sa exam, unya karon kuan nag process a sa papers incoming first year dli pa fully enrolled.. processing palang.
  Translation:
  "Not my first visit. I visited before taking the entrance exam and now I am processing the papers as an incoming first-year student who is not yet fully enrolled. It's still in the processing stage."

- What were your first impressions of the campus signage and navigation aids upon your arrival? Did anything stand out as particularly helpful or confusing?
  VR1: naa parehas anang label sa kada door sa room.
  Translation:
  "there is a label on each door of the room"
- Have you had to ask staff or students for directions? If so, how helpful were they in guiding you to your destination?
  VR1: Yes, pero mauwaw jud kay stranger man
  Translation:
  "Yes, but it would be overwhelming because the person is a stranger."
- Did you receive or use any printed materials (e.g., brochures, maps) for navigation? How useful were these materials?
  VR1: wala pero naay card nga nakabutang kung unsa nga facility ang adtoan pero walay directory guide
  Translation:
  "There isn't one, but there is a card indicating which facility to go to. However, there is no directory guide."
- Overall, how satisfied are you with the ease of navigating the campus? What could be done to improve your satisfaction?
  VR1: Okay ra, dapat naay map nga klaro.

Translation:
"It's okay. There should be a clear map."

- Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.
  VR1: wala pa
  Translation:
  "Not yet"
- What are your thoughts on having an interactive kiosk navigation system on campus?
  VR1: ahw oks kaayo og e implement kay mas sayon ang pag locate basta ma sabtan lang ang instruction.
  Translate:
  "Oh, it would be very good to implement because it will be easier to locate as long as the instructions are understood."
- How do you think an interactive kiosk navigation system could impact your overall campus experience? What features do you believe would be most beneficial for such a system to include?
  VR1: dapat ang mga basic english gamiton para dli sayon sabton.
  Translation:
   "Basic English should be used so that it is not difficult to understand."

Visitor Respondent 2

- Is this your first visit to EVSU Ormoc Campus, or have you visited before? If you have visited before, have you noticed any changes in the navigation aids or signage?
  VR2: No, before naka sulod na ga take kog scholarship sa DOST.
  Translation:
  "No, before this, I had already entered the EVSU Ormoc Campus when I took a scholarship with DOST."

- What were your first impressions of the campus signage and navigation aids upon your arrival? Did anything stand out as particularly helpful or confusing?
  VR2: Sa first nako na ning anhi naay ga assist namo og asa amo adtoan. sa karon nag orient man mi so wala pami nag lisod kay naa raman sa court ang mga kinahanglan pero og mag pass namis mga documents mag lisod nami kay wala paman ko ka sweto ari
  Translation:
  "During my first visit, there was someone assisting us with where to go. Now that we are being oriented, we haven't had any difficulties yet because the necessary things are located in the court area. However, when we start submitting our documents, it might become challenging because I'm still not familiar with the place."

- Have you had to ask staff or students for directions? If so, how helpful were they in guiding you to your destination?
  VR2: Yes
  Translation:
  "Yes"

- Did you receive or use any printed materials (e.g., brochures, maps) for navigation? How useful were these materials?
  VR2: ge tagaan ug instruction pero dli kaayo klaro
  Translation:
  "I was given instructions, but they weren't very clear."

- Overall, how satisfied are you with the ease of navigating the campus? What could be done to improve your satisfaction?
  VR2: sa karon wala pa kay nag orient pamn mi ron puhon cguro.
  Translation:
  "For now, we haven't had it yet because we are still being oriented. Maybe in the future."

- Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.
  VR2: Ouh sa mcdo, ako ra kay ma sabot raman pud gud siya.
  Translation:
  "Oh, at McDonald's, It's okay I can understand it myself because it's quite simple."

- What are your thoughts on having an interactive kiosk navigation system on campus?
  VR1: Okay lang
  Translate:
  "It's okay"
- How do you think an interactive kiosk navigation system could impact your overall campus experience? What features do you believe would be most beneficial for such a system to include?
  VR1: ako ma suggest use basic words ra jud.
  Translation:
  "I would suggest using only basic words."

Interview Transcription

Question	Respondents	
How would you describe your experience in locating different offices and facilities on campus since you started here? Have you faced any difficulties or challenges?	**Student Respondent 1**	**Initially confused, relied on asking others**
	Student Respondent 2	**Initially confused, familiarized over time**
	Student Respondent 3	**Confused, many corners, asked around**

		Student Respondent 4	Initially difficult, became familiar

Initial confusion is common, with reliance on asking others for directions. The campus layout seems to be a significant challenge, especially for new students and visitors. This indicates a need for better navigation aids to ease the transition for newcomers.

Question	Respondents	
Can you provide examples of specific instances where you had trouble finding a particular office or facility? What were the main issues you encountered?	**Student Respondent 1**	Facilities far apart, needed to ask for help
	Student Respondent 2	Didn't answer..
	Student Respondent 3	*We still got lost, like during our activity there was a game area, and we were confused about its location. There wasn't a proper guide or direction to assist students.*
	Student Respondent 4	*especially when there are signatures needed and the registrar and cashier offices were separated before, so it was difficult for me. Although now they are next to each other, there are still instances where someone familiar needs to accompany you for enrollment, and I don't know where the other offices in other departments are, so we still end up looking for them.*

Specific pain points highlight the need for accurate, updated information and better directional aids to assist students and visitors in locating key facilities.

Question	Respondents	
What resources or tools (e.g., maps, signage, online directories) have you seen and used to navigate the campus? How effective have these resources been for you?	**Student Respondent 1**	*"there is a label on each door of the room"*

	Student Respondent 2	*Yes, like the bulletin board, but sometimes we forget about it because we rely on social media. So, I often ask the guard or other students instead.*
	Student Respondent 3	*I didn't use any guides; I just asked around.*
	Student Respondent 4	*I found a map for EVSU, but I prefer to ask other students who know the place. I haven't noticed any signage, but maybe it's because I don't really get to see the place much. What I did notice was the map on the bulletin when you enter the campus. I would say it's effective, but it's still a hassle.*

Students primarily rely on asking others, with some use of bulletin boards and labels. Existing resources like bulletin boards and door labels are underutilized or ineffective. Enhancing these tools could improve campus navigation.

Question	Respondents	
What were your first impressions of the campus signage and navigation aids upon your arrival? Did anything stand out as particularly helpful or confusing?	Student Respondent 1	*"there should be a clear map"*
	Student Respondent 2	*The labels in each classroom should be updated to inform students and prevent confusion. It would also be helpful to have signage indicating the location of each department.*
	Student Respondent 3	*"It would be better to improve the bulletin board, making it more organized with accurate guides. This way, if you need to ask for directions, you won't get lost."*
	Student Respondent 4	*"Um, like an interactive map or something that can help them navigate to their destination."*

Clear maps, updated labels, and interactive maps are common suggestions. There is a strong demand for better visual aids and interactive tools to facilitate easier navigation, indicating that current resources are insufficient.

Question	Respondents	Answers
Have you ever used a kiosk for navigation or other purposes before, either on this campus or elsewhere? If so, please describe your experience.	**Student Respondent 1**	*"No"*
	Student Respondent 2	*"No"*
	Student Respondent 3	*"Not yet"*
	Student Respondent 4	"I've experienced this in the mall for me, it's useful. But it would be better if an interactive kiosk were implemented on campus."
	Security Personnel Respondent 1	*"Not yet"*
	Visitor Respondent 1	*"Not yet"*
	Visitor Respondent 2	*Yes, at McDonald's, It's okay I can understand it myself because it's quite simple.*

The findings reveal a predominant lack of experience with kiosk systems among respondents, with most indicating they have never used one. However, the few participants who have encountered kiosks in commercial settings reported positive experiences, describing them as useful and easy to understand. Notably, one respondent explicitly suggested that an interactive kiosk would be beneficial on campus. These responses indicate a general unfamiliarity with kiosk technology in the campus community, yet also suggest an openness to its potential benefits. This insight underscores the importance of creating an intuitive, user-friendly design for the EVSU Ormoc campus navigation kiosk, while also highlighting the potential need for user education during implementation.

Question	Respondents	
What are your thoughts on having an interactive kiosk navigation system on campus?	**Student Respondent 1**	*"Oh, it would be very good if it would be implemented because it will be easier to locate as long as the instructions are understood."*
	Student Respondent 2	*"It would be much easier for students since they are accustomed to technology. However, guidance is still needed because not everyone is familiar with technological advancements."*
	Student Respondent 3	*"It would be great if it gets implemented. When it does, there should be clear instructions because not everyone is engaged with technology."*
	Student Respondent 4	*"It would be better since it's interactive; it seems like it could help students find specific facilities more easily, such as the registrar and cashier."*
	Security Personnel Respondent 1	*"It's okay, just so I can learn as well."*
	Visitor Respondent 1	*"Oh, it would be very good to implement because it will be easier to locate as long as the instructions are understood."*
	Visitor Respondent 2	*"It's okay"*

A positive reception to the idea of an interactive campus navigation kiosk, with an emphasis on its potential to improve wayfinding. However, they also underscore the importance of designing a system that is accessible and easily understood by users with varying levels of technological expertise.

That is why the researcher came up with the following needs assessment:

- **Easy access to detailed maps**
- **Searchable directory**
- **Intuitive Interface**
- **Up-to-date campus map information**