ATMOSCUBE

Atmoscube is a future city-build game powered with Internet of Things (IoT), Artificial Intelligence (AI) and Augmented Reality (AR) technologies. Atmoscube is a digital, tangible and special game consul installed at home. This product is a forward step toward education and development of societies empowerment regarding personal impact on the environmental and biological diversity.

Current State — Existing touch-points
Future State — Proposed new touch-points
Current-future state — Proposed new improvements on existing touch-points

TOUCH POINTS INDICATORS

- **The Internet** — Icon indicating touch point. Color may vary between sections
- **Home** — Icon indicating touch point. Color may vary between sections
- **Car** — Icon indicating touch point. Color may vary between sections
- **Hologram Box** — Icon indicating touch point. Color may vary between sections
- **Interaction with voice** — Icon indicating touch point. Color may vary between sections
- **Listening to Speaker** — Icon indicating touch point. Color may vary between sections
- **Interaction with Touch** — Icon indicating touch point. Color may vary between sections

Stages — Stages user overtakes which shapes the experience

AWARENESS | CONSIDERATION | INTERNET OF THINGS TUTORIAL | GAME PLAY TUTORIAL | GAME CHALLENGES | ARTIFICIAL GENERATED GAME CHALLENGES | OUTCOMES

Touch-points sub-stages: Past Experience · Awareness · Consideration · Physical Consideration · Purchase · IoT introduction · IoT List of devices · Overview of information · Information about select- · Land type · How to Select the land · How to Look around · How to Moving · How to Mack Roads · How to Build Buildings · Facilities · Challenges List · Challenges Outcome · Challenges Completed · Get the strategic results · Sharing · Real -life Outcomes

Emotions / Activities / Thoughts / Goals

#	Emotions Stage	Activities (Description of users' activity at any touch point)	Thoughts (Users' thoughts/understanding from each touch point)	Goals (Users' needs at any touch point)
1	Unmotivated	Working. Playing old games. Attending to other activities. Exercise.	"I like to play strategy games." "I like the never-ending challenges."	Overwhelmed by working. Need a break. Need to turn the thoughts off.
2	Exited	Hear from friends, App Stores, Education Services, Internet advertisements Museums and zoos.	"Ohhh, is there a new game out?" "I heard it is similar to Pokemon Go?"	Find a new and engaging game. Accessible everywhere. Interested to experience the feature of AR and VR.
3	Interested	Advertisements. Game website. Watching gameplays. Comparing with other games. User reviews.	"I missed my gaming time." "This game is a new generation of gaming."	To figure out the genre. If there is any system or physical requirements. If the game is interesting. People Ratings and reviews.
4	Concerned	Store visit. Looking at existing setups. Look of the portal in side others' house.	"I have to buy a portal for the game?" "It is look very nice."	Extract the best experience. Improve the interior design. Up to date with the technology.
5	Exited	Order Online. Collect from store. Prepare a place for the portal.	"I am very exited about this game." "This is the new way of living."	To keep the room tidy. Access the game and portal as soon as possible.
6	Amazed	Listening to a voice over: "This game is using Internet of Things technology information received from sensors of machines and devices at your place."	"Interesting. How should I know which device or machine is connected."	
7	Interested	Listening to a voice over: "I have send a list of detected sensor ready machines and devices to your cellphone." "It helps you to find the sources."	"I can see all my machines and devices." "look this even has detected my car." "What are the numbers next to it?"	Understand the level of information detail used in the game.
8	Concerned	Listening to a voice over: "Click on any device and listen to the descriptions about the clicked element." Click on car listed on cellphone.	"What the game knows about my car?"	Understand the usage of this information in the game.
9	Relived	Listening to a voice over: "The information revived from your car indicates that your car has emitted 312 parts-per-million (ppm) CO_2 which is higher than the normal for one person."	"Relief. It only access the surface of my information." "Very educational" "I cannot imagine how this info will be used in the game?"	
10	Engaged	Listening to a voice over: "You can select your favorite land type by asking me to move forward or back. And select to when you decide." Asking Name to move forward and back.	"I like the interaction system." "Shall I chose desert, green land, snow land or jungle."	Chose the best looking land type.
11	Interested	Commanding the Name to select the land type. Listening to a voice over: "You have selected the Greenland land type."	"This is similar to my city land." "It been like I have been talking so far."	Chose the best looking land type.
12	Confused	Listening to a voice over: "To rotate command to select "Rotate and slid your finger on top surface of the box." Calling "Rotate" and sliding a finger on the top surface of the box.	"I can see the rotation and trains moves easily." "How can I move back and forward."	How to move back, forward, left and right?
13	Engaged	Listening to a voice over: "Select free move by commanding "Move" and slide your finger on top face of the box." Calling "Move" and sliding a finger on the top surface of the box.	"I can see the vastness of the land." "How can I build my city."	How to build roads and the city?
14	Confused	Listening to a voice over: "Select road option bey commanding "Road". Point at the road start point using one finger and stretch the road with another finger. Release both fingers to finalize." "You curve the road by moving the road segments."	"Two steps to draw a road is easy."	How to build buildings.
15	Interested	Listening to a voice over: "You can select commercial, residential or industrial by calling its name." "Now you can highlight a land next to a road as residential by sliding your finger." Sliding and land is highlighted green.	"It builds the buildings automatically on the highlighted area." "How the power and other facilities applies?"	How to provide facilities to the buildings?
16	Amazed	Listening to a voice over: "You facilitate your city by managing your personal use. The closer to the normal personal use, the better facilitation over city."	"I understand. So if I reduce water usage, my city will have a better water quality for example." "Or if I reduce power or usage my city will be powered."	Managing the personal use of facilities in real life to improve the facilities in the city game.
17	Frustrated	Listening to a voice over: "You can ask me "What is the main problems in the city?"" Asking Name "What is the main problem is the city?"	"It feel some who odd. I am talking to my self" "What is the problem?"	Understanding the citizens problems to help them toward a better life.
18	Interested	Listening to a voice over: "You have to complete challenges to achieve more detailed city build options." "First challenge, Reduce your electricity usage to reduce CO_2 emissions."	"Ok, I can do that." "There is many lights on in room which I do not need, so I turn them off."	Completing the challenges to archive better game play experience.
19	Motivated	Listening to a voice over: "Your personal electricity usage has doped to a green level." "Now you are causing 25% less CO_2 emotion." "First park package is now available for your city."	"Parks are great. They make my city look better." "Also the higher land value means the higher tax rate from that suburb."	To build park and improve the land value which results in a higher tax rate.
20	Glory	Listening to a voice over: "Select park by calling "Park". Calling "park" Listening to a voice over:"You can select the desired park from the list by pointing at it." Point and pick a pre build park and placing it on the map.	"Parks makes the city look better as well as increasing the city population."	Complete challenges and develop the city more and more.
21	Curious	Asking Name "What is the main problem is the city?" Listening to a citizen's voice:"Cars are causing traffic and polluting the air."	"That is not good. This will h all my citizens and my hospitals are not capable of help." "I have to spend all my money to build all these hospitals."	Complete challenges to stop citizens from death.
22	Motivated	Listening to a voice over: "Your new challenge is walking instead if driving for a week for places in one kilometer radius."	"Oh cool, so I have to walk to supermarket next to my place instead of driving." "Thats easy. Challenge accepted."	Completing the challenges to archive better game play experience.
23	Glory	Listening to a voice over: "You have completed your first challenge." "Now your citizens are in good health." "Now you have access to first stage of parks. They will improve the land value."	"Parks are great. They make my city look better." "Also the higher land value means the higher tax rate from that suburb."	To build park and improve the land value which results in a higher tax rate.
24	Excited	Cleaning the hologram box. Setting the city in a favorite view point.	"I have a gathering with my friends to day." "Have to make sure everything is perfect."	To showcase the hologram city as a very fancy and bright aquarium to the guests. Showcase its benefits.
25	Empowered	Opening the car door. Remembering the effects of car driving in the city on air quality. Walking to a bus station. Looking at the world differently.	"Monday again. Have to go to work." "If I drive to work the car will emit CO2!!!" "I may walk or catch a bus"	Reduce the negative effects on the real and virtual world by making better decisions.

Emotions Journey — Users emotional state as interacting with touch points