



RAWANA PROJECTS

iAQUA

Saving of the world **AQUA**



OUR TEAM



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PROBLEM



Water surface pollution due to garbage accumulation.



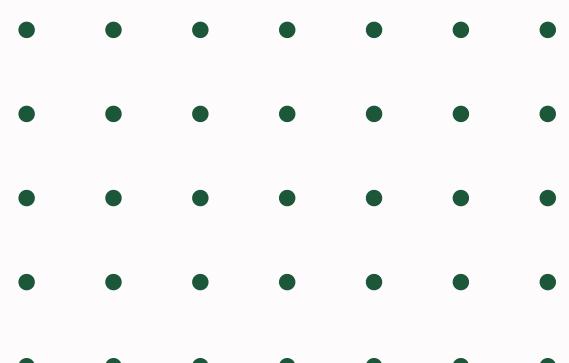
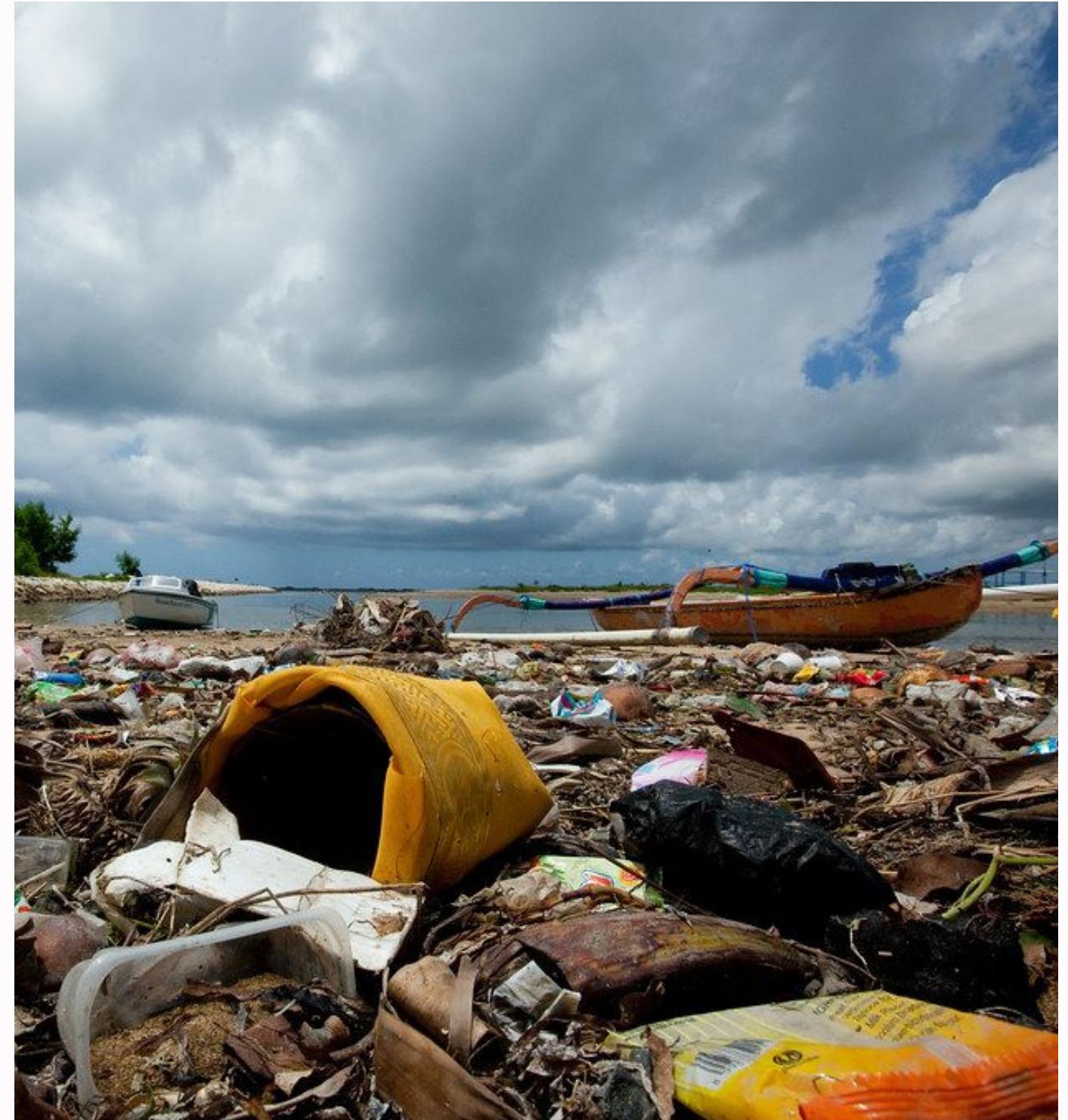
Disruption of aquatic ecosystems caused by floating debris.



Degradation of water quality from surface garbage.



Obstruction of waterways leading to drainage and flooding issues.





MISSION STATEMENT

**"Preserving water
resources for a sustainable
future."**

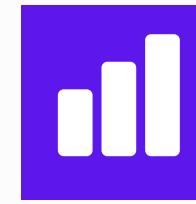
SUPPORTING DATA



Researchers surveyed more than 75,000 bodies of water in 89 countries and found that more than 40 per cent were severely polluted.



Most of the freshwater resources are either unreachable or too polluted, leaving less than 1% of the world's freshwater, or about 0.003% of all water on Earth, readily accessible for direct human use.



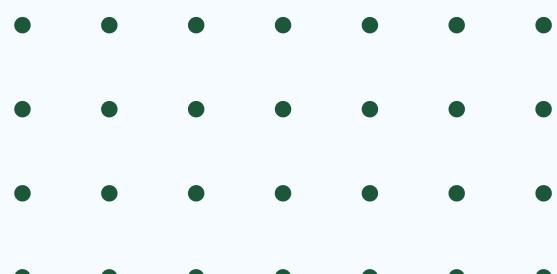
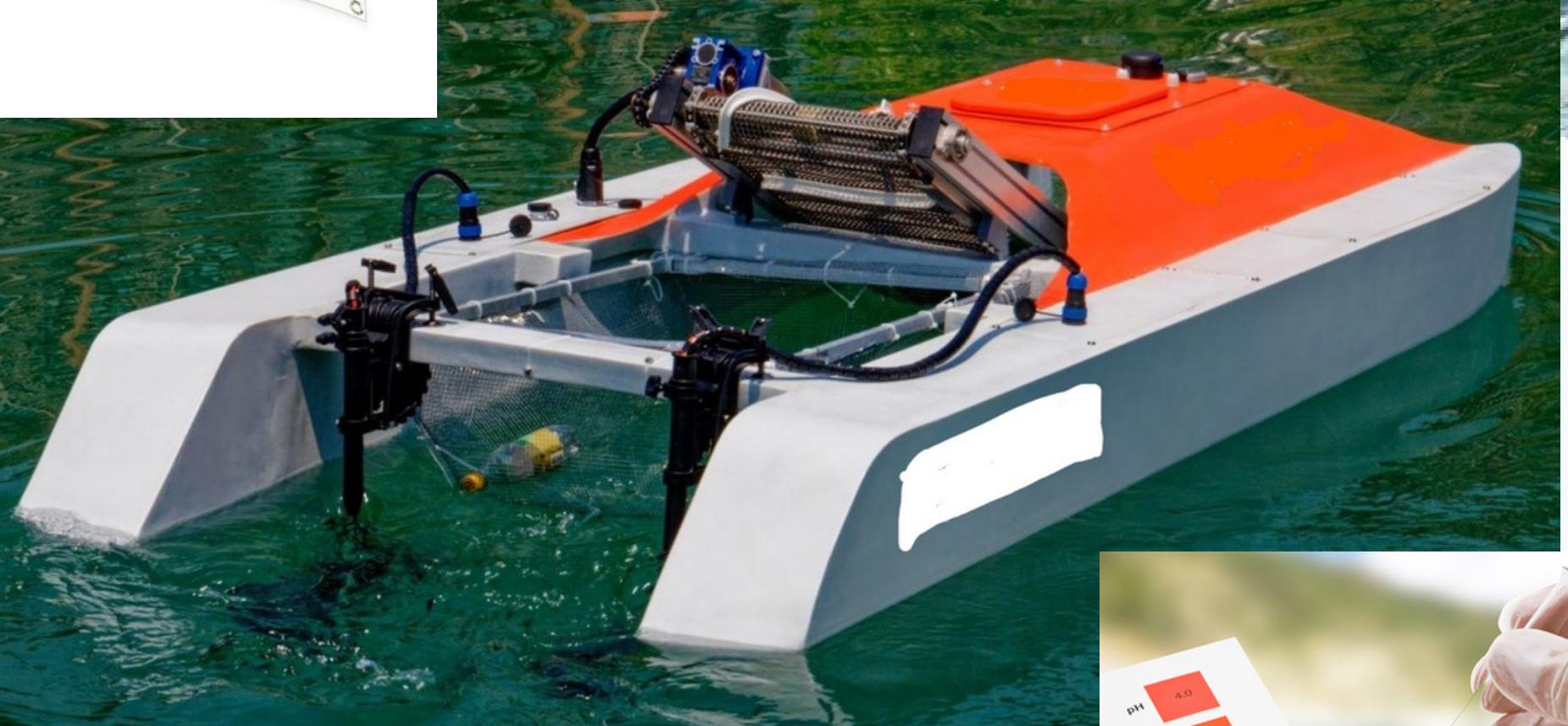
By 2050 47% of people on earth will struggle to find drinking water

SOLUTION

Creating IoT-enabled water garbage cleaning robots for efficient debris detection, collection, and real-time monitoring, ensuring effective and sustainable cleaning of water surfaces.



PROTOTYPE



USER INTERFACE

The image displays a collage of three mobile application screens and a detailed dashboard, illustrating the integration of user interface design and data visualization.

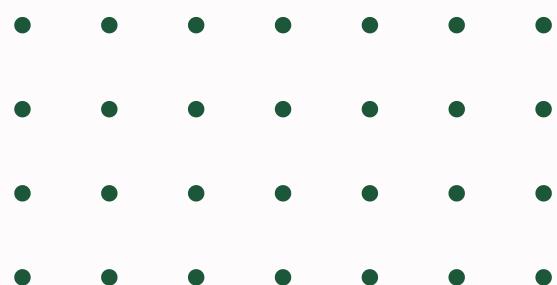
Left Screen: A travel-themed mobile application named "iAQUA". It features a vibrant illustration of a winding river flowing through a landscape with wind turbines and a sailboat. A quote by Oscar Wilde is displayed: "Live with no excuses, and travel with no regrets." Below the illustration are two buttons: "Sign In" and "Create an account". At the bottom is a "Skip" button.

Middle Screen: Another mobile application screen showing a search interface. It includes a "SEARCH" bar with placeholder text "We're offering you special place to travel", a "Discover" section with categories "Places", "Inspiration", and "Recommended", and a grid of travel-related images. Buttons at the bottom include a home icon, a location pin, a notification bell, and a search icon.

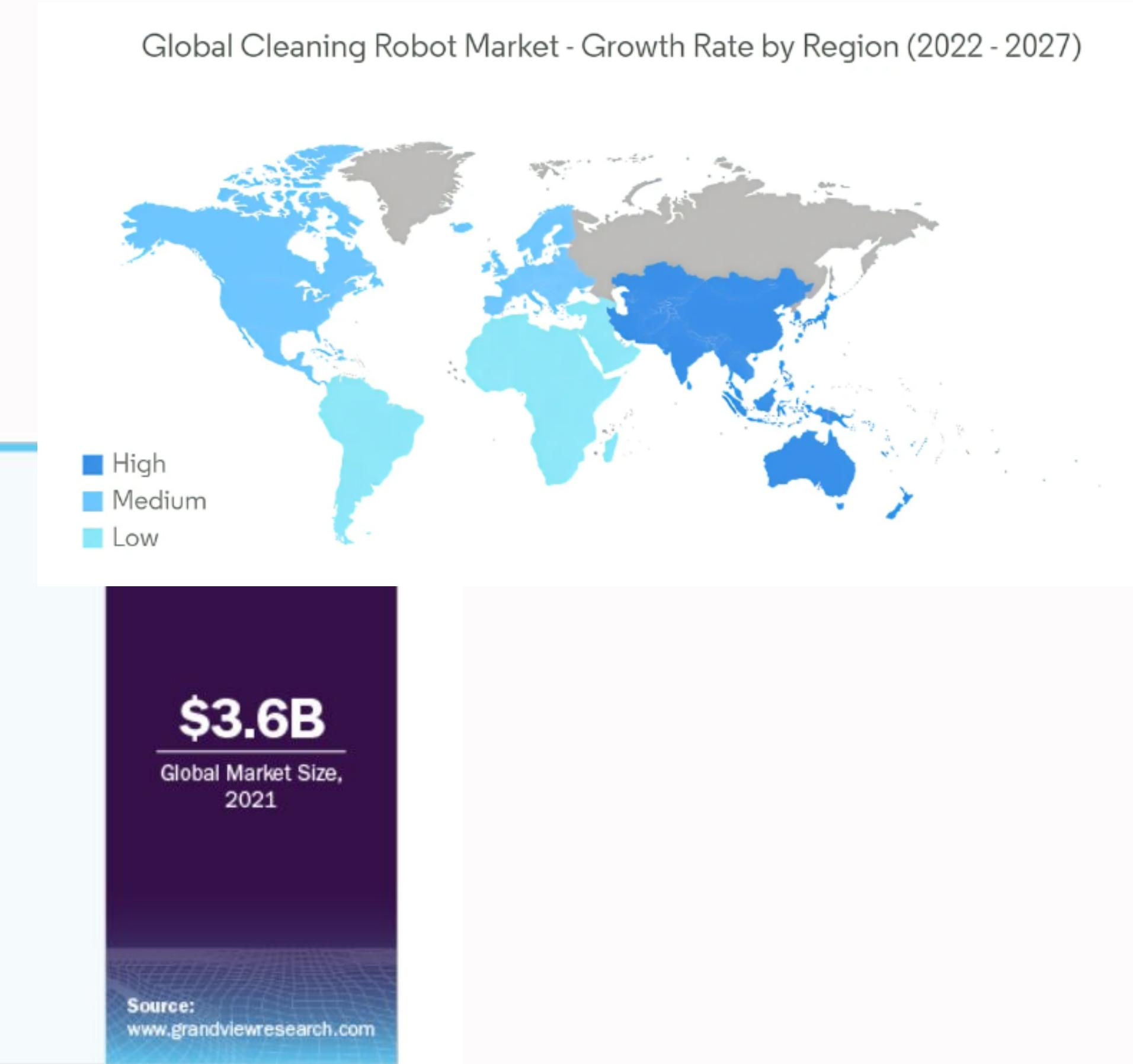
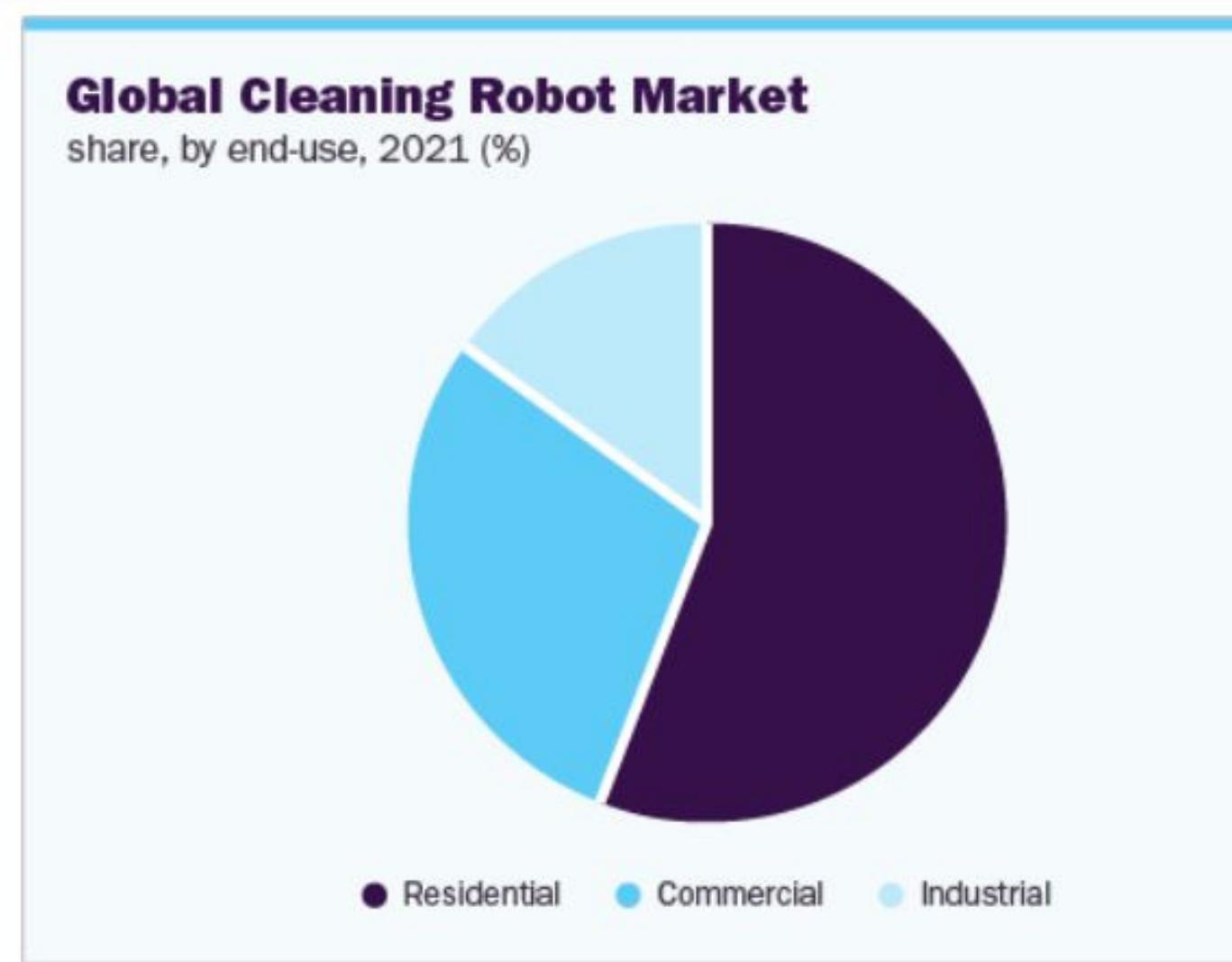
Right Screen: A data dashboard titled "of Wallet". It contains several data visualizations:

- Graph #10:** A line graph showing "Downloads" over time from September 2015 to February 2016. A red circle highlights a peak in December 2015 labeled "123 789 Downloads".
- Graph #11:** A scatter plot comparing "Google" (red dots) and "Apple" (blue dots) downloads from September 2015 to February 2016.
- Donut Chart #4:** A donut chart showing market share: Microsoft 55%, Apple 22%, and Samsung 5%.
- Graph #12:** A line graph showing "Downloads" over time, with a red circle highlighting a peak in December 2015 labeled "123 789 Downloads".
- Large Blue Bar:** A prominent blue bar with the text "99,9%" and a bar chart icon.
- Pie Chart:** A pie chart titled "Share of Wallet" showing the distribution of market share among various brands. The largest segment is Amazon at 62.7%, followed by Google at 25.6%, and Other at 7.6%.
- Text Box:** An orange box containing the formula for Share of Wallet:
$$\text{Share of Wallet} = \frac{(1 - \text{Rank}/\text{Number of Brands} + 1) * (2/\text{Number of Brands})}{\text{Number of Brands}}$$

Two black arrows point from the "Downloads" peaks in the graphs on the right towards the corresponding data points in the pie chart on the right side of the dashboard.



MARKET SIZE



BUSINESS MODEL



Government
Fundings

Environmental
organizations
supports

Private
Investments

FUTURE WORKS



Underwater drones or remotely operated vehicles could be used to explore and clean hard to reach areas in oceans, lakes, and rivers



**Making a cloud-based platforms to collect and analyze data from IoT devices for better decision-making in waste management.
(Building a map)**



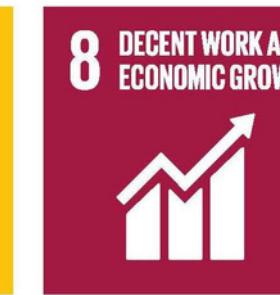
Introducing our system to the international market.

CHALLENGES AND CONSIDERATIONS

-  Connectivity challenges
-  Power management
-  Environmental impact
-  Regulatory compliance
-  Adaptability to changing technology



SUSTAINABILITY





VISION

**"Creating a thriving
planet, safeguarding
nature for all."**



Thank
you!



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