Overview: Water Conservation Campaigns in Sharjah, United Arab Emirates

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Note: This is a condensed version of the full report.

INTRODUCTION

This project has been broken up into three studies, each guided by a research question. The studies are as follows: The Exploration Study, *The Exploration of Conservation Efforts in Sharjah, UAE*; the Design Study, *Design Sprint Workshop: Ideating Water Conservation Campaigns at the American University of Sharjah*; and the Feedback Study, *Feedback on Water Conservation Campaigns Ideated by Residents of Sharjah*. The goal was to understand, design, and evaluate campaigns that suggest limiting water consumption in Sharjah.

The three research questions guiding the studies are:

1. "What are the social benefit campaigns that have already been created in Sharjah?"
2. "How can we design three creative campaigns aimed to change the behavior of water consumers and encourage water conservation?"
3. "How will each of three campaigns produced in the Design Study be perceived by Sharjah residents?"

FINDINGS

In the following sections, we provide our findings from our three studies, *The Exploration of Conservation Efforts in Sharjah, UAE*; *Design Sprint Workshop: Ideating Water Conservation Campaigns at the American University of Sharjah*; and *Feedback on Water Conservation Campaigns Ideated by Residents of Sharjah*.

The Exploration of Conservation Efforts in Sharjah, UAE

First, we will present the findings from the observational study on the AUS campus, then we will present the findings from the interviews with the SEWA conservation department and the AUS Office of Sustainability. The main findings of the observational study are listed as follows:

1. A campaign's location is key to its success.

2. Design elements help convey messages.

3. Campaigns should reach their target audiences through different methods.

4. Campaigns do not normally involve monetary investments.

5. Messages of campaigns are framed differently.

6. Rewards convince the audience of potential benefits.

The main findings from our interviews with SEWA officials are the following:

1. Designing a campaign takes time and reiterations.

2. Relating the campaign's message to the target audience encourages engagement.

3. Different target audiences necessitate different delivery methods.

4. Targeting the next generation helps create lasting impacts.

5. Water conservation campaigns aren't the only social benefit campaigns in Sharjah.

6. Incentives can be used to attract people towards a campaign.

7. The success of a campaign can be measured through surveys.

Design Sprint Workshop: Ideating Water Conservation Campaigns at the American University of Sharjah
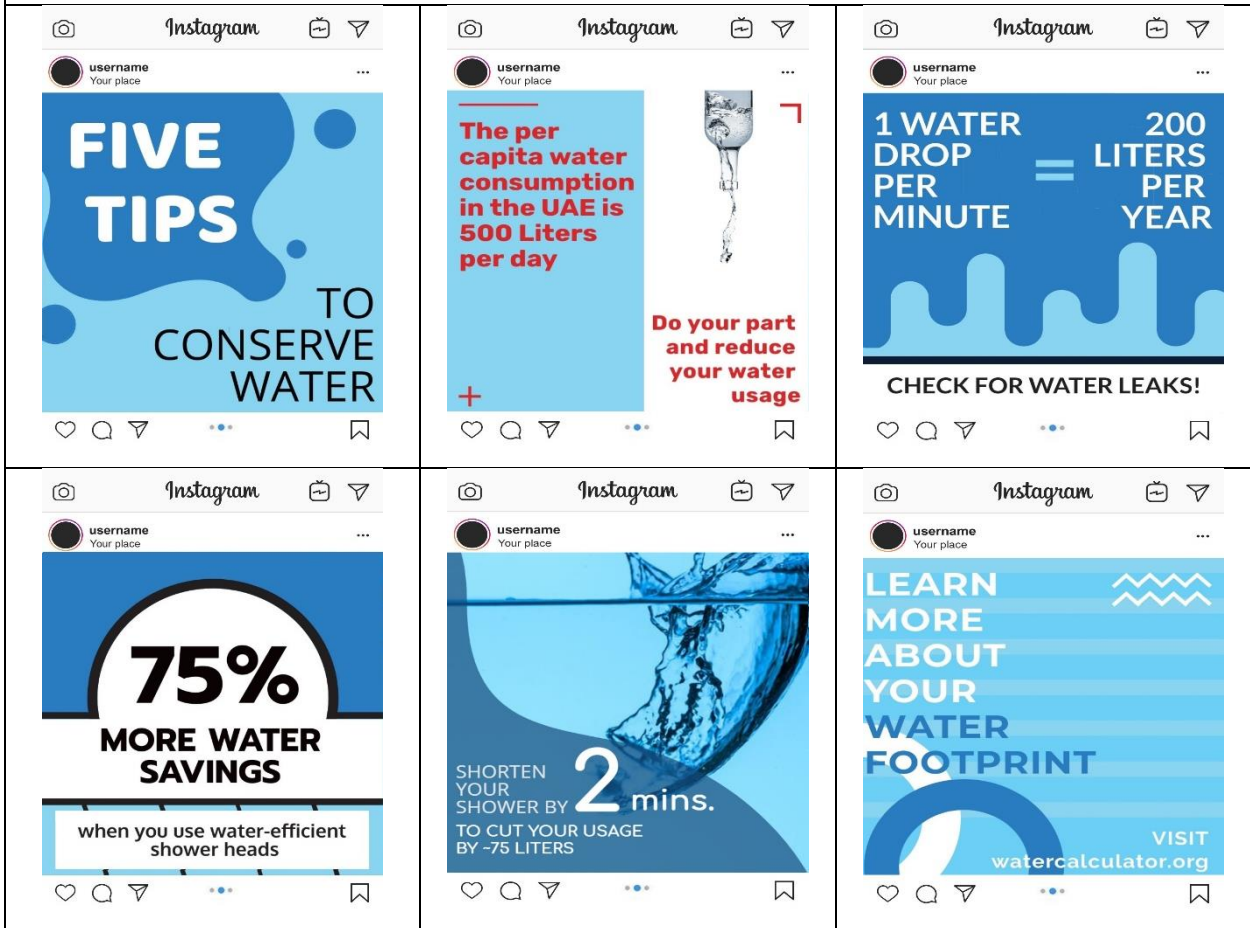
First, we will present the findings from the pilot test of the workshop protocol, the two Design Sprint workshops, and the campaigns produced by the researchers from the prototypes created during the workshops. Several themes emerged in the pilot test, Design Sprint workshops, and three campaigns. The four findings from our pilot test were:

1. Prior to conducting a Design Sprint workshop ensure the time needed for each stage is correct.
2. Instructions must be clearly written for participants.
3. Reminding participants of the time remaining to fulfill the activity will help the participant manage their time.
4. Check for understanding after directions are given out to participants.

From the Design Sprint workshops, we used marketing frameworks to analyze and categorize the products. Our findings were:

1. Nine prototypes were produced from the Design Sprint workshops.
2. Themes regarding content, delivery, incentives, and messaging emerged from the prototypes.
3. Five campaign deliveries emerged: Informative, App, Event, Device, and Games.
4. Three campaigns were created from the findings of the Design Sprint:
5. Check for understanding after directions are given out to participants.
    I. Social Media
    II. Mobile app
    III. Event
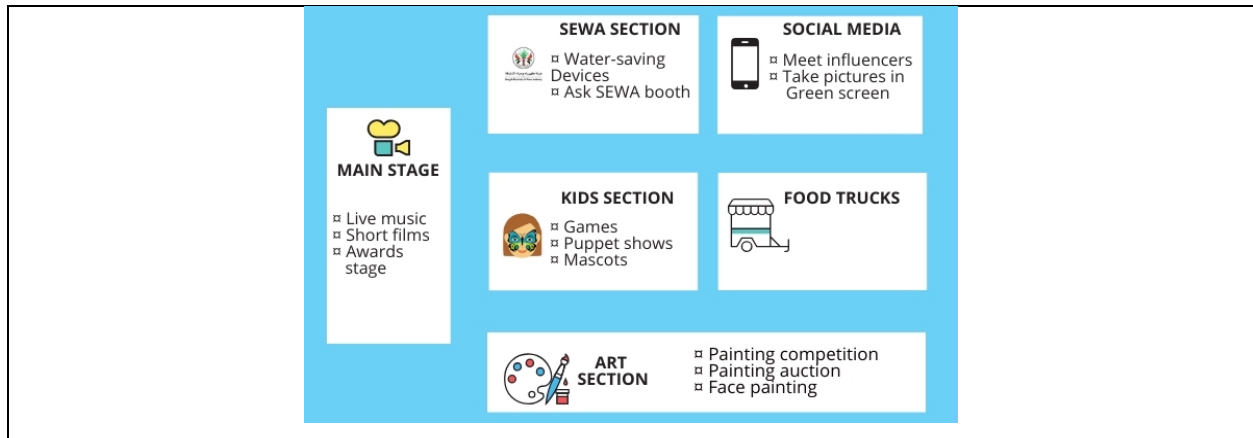
Social Media

FIVE TIPS
TO CONSERVE WATER

The per capita water consumption in the UAE is 500 Liters per day

Do your part and reduce your water usage

1 WATER DROP PER MINUTE = 200 LITERS PER YEAR

CHECK FOR WATER LEAKS!

75%
MORE WATER SAVINGS

when you use water-efficient shower heads

SHORTEN YOUR SHOWER BY 2 mins.
TO CUT YOUR USAGE BY ~75 LITERS

LEARN MORE ABOUT YOUR WATER FOOTPRINT

VISIT watercalculator.org

App

هيئة كهرباء ومياه الشارقة
Sharjah Electricity & Water Authority

LOGIN

Account Number

Password

☑ Remember Me   Sign In

🔒 Forgot your Password?

Consumption Tracker

Be Careful!
You are going over your average consumption, go to our tips section to find a solution!

Consumption Tracker

On Track!
Thank you for helping save the planet!

هيئة كهرباء ومياه الشارقة
Sharjah Electricity & Water Authority

Consumption Tracker
Water Saving Tips
Payment and Bills
Sustainability
Smart Services
Fault Reporting
Communicate with Chairman
Contact Us
Sign Out

Event

Feedback on Water Conservation Campaigns Ideated by Residents of Sharjah

From the interview with SEWA representatives of the Conservation Department, the main points of feedback were:

1. Prior to conducting a Design Sprint workshop ensure the time needed for each stage is correct.

2. For the event, to use influencers to spread the word.

3. An event, like the one we designed, would require a large amount of preparation.

4. The app redesign was not considered a campaign by the Conservation Department.

5. SEWA primarily uses social media and events to for awareness.

From the surveys, the three campaigns received 118 feedback responses in total: forty for the social media post, thirty-eight for the app, and forty for the event. The main findings for the surveys were:

1. Social media and app campaigns were deemed valuable campaign deliveries contrastingly to the event campaign.

2. Participant engagement would be higher the less the campaign asked of them.

3. Many participants would engage with social media campaigns that were across multiple social media platforms.

DISCUSSION

The findings from each of our three studies contributed to our goal of determining an impactful method to design water conservation campaigns in Sharjah. In our first study, we reported what we perceived as the most critical components of social benefit campaigns from what we observed. Marketing frameworks acted as a skeleton to help us identify common themes of each campaign we analyzed. We concluded that campaign design is a timely process that requires many iterations. Additionally, we found that campaigns should be visible, accessible, and cater to the target audience in terms of delivery, messaging, and rewards.

For the second part of our study, we executed Design Sprint workshops for the AUS community, which resulted in nine water conservation campaign prototypes. By completing a similar analysis to that of the previous study, we determined five main categories of the campaigns: Informative, Event, App, Device, and Game. Three water conservation campaigns (Social Media Post, App, and Event) were then created based on our findings from both studies.

In the third study, we received feedback from the AUS community and Sharjah residents on the content, design, and engagement of the campaigns we created. We found that participants were more likely to engage with the campaign that required the least investment from them— when participants were asked if they would engage in the campaign, more participants answered "no" to the event than the app and social media. In conclusion, we learned the different design elements of social benefit campaigns, gained insight from campaign creators, received nine water conservation campaign prototypes, and acquired meaningful feedback from the Sharjah community on campaigns we created. In the next sections, we present our recommendations based on the outcome of the three studies and list potential limitations.

Limitations

Although there were many strong findings from our studies, we did face a few limitations, which are listed in the next section.

The Exploration of Conservation Efforts in Sharjah, UAE

1. The SEWA campaigns were solely from a report given to us by SEWA on their 2018 achievements.

2. The SEWA report was written entirely in Arabic, and it was translated to english by one of the researchers.

3. The AUS campaigns observed were actively being implemented while the SEWA campaigns were already executed, meaning there was not access to certain elements.

Design Sprint Workshop: Ideating Water Conservation Campaigns at the American University of Sharjah

Lack of a large sample size of local participants in our workshops. Expanding the target to other members of the Sharjah community may have presented more ideas that otherwise wouldn't have with participants solely from AUS.

Feedback on Water Conservation Campaigns Ideated by Residents of Sharjah

1. It was difficult to present the campaigns to the respondents because of the language barriers. All campaigns were written and presented in English.

2. Respondents' lack of background knowledge in the method of delivery of the produced campaigns limited understanding.

Recommendations

In the following sections, we provide recommendations for SEWA in terms of the design, organization, and evaluation of campaigns, based upon our findings from our three studies.

Recommendations Based on Study I: The Exploration of Conservation Efforts in Sharjah, UAE

Based on the qualitative analysis of observational data and interviewee's responses, we have the following recommendations for SEWA:

- **Use a marketing framework to aid in the design process.** By doing so, each campaign's elements are organized and repeatable. Using the Hook Model and the Marketing Mix allows for campaigns elements to be categorized, which makes the identification of themes an easier process.
- **Continue to use rewards to pique the interest of the target audience**. Rewards prove to the audience the benefits of their participation, which can potentially increase the engagement of the campaign.
- **Publish campaigns in high traffic areas to increase visibility**. By publishing a campaign that can be distributed broadly and viewed by many people, the opportunities for people to engage increase.

Continue to use campaign formats that best suit the target audience. Audiences of differing demographics are more receptive of the deliveries that cater to them (e.g. kids and puppet shows).

Recommendations Based on Study II: Design Sprint Workshop: Ideating Water Conservation Campaigns at the American University of Sharjah

Based on the analysis of our pilot test workshop, Design Sprint Workshops, and three campaign designs, we have the following recommendations for SEWA:

- **Run and participate in Design Sprint workshops involving the target audience**. This process would be beneficial in gathering a large pool of ideas from the anticipated audience.
- **Use different challenges and topics for Design Sprint workshops**. Due to the flexibility of Design Sprints, adapting and modifying the stages to fit the theme or expected outcome of the workshop is easily done. A multitude of unique ideas can be produced from different workshops.
- **Complete pilot tests to determine strengths and weaknesses of protocols**. By doing so, changes can be made to better facilitate a workshop. Feedback from participants and observers can help guide the workshop to be better.

Recommendations Based on Study III: Feedback on Water Conservation Campaigns Ideated by Residents of Sharjah

Based on the qualitative analysis of interviewees' responses and survey responses, we have the following recommendations for SEWA:

- **Continue requesting feedback on campaigns.** By doing so, SEWA can determine the elements of a campaign that are most desirable by the community of Sharjah and those that are not. By using an online survey method or in-person survey methodology, feedback can be received to help better the campaign design process.

- **Continue using social media to distribute campaigns.** The social media campaigns can be broadened to more than just what is currently being used by SEWA, which is primarily Instagram. Using different formats including short videos and animations in the campaigns would be a way to catch the audience's attention.

- **Redesign the SEWA app with a user-friendly design.** By doing so, the SEWA app will look more appealing to the users. By choosing a design that is minimalistic and incorporating an easily understood menu, users may be more likely to engage with the app. Including a feature like a water consumption tracker may appeal to the audience while promoting the idea of water conservation.

- **Continue to promote conservation through awareness events**. Events have the ability to have a big impact on the community. By continuing to hold events, SEWA's message will be able to be projected to a large audience.

Additionally, we recommend longer term studies measuring the impact of campaigns

By conducting long-term studies, SEWA will be able to measure the impact of campaigns on their target audience. This will help the campaign design process to determine elements of campaigns that worked and did not work. Long term studies allow for changes to be seen in the target audience, including behavioral and social changes. This would be beneficial to SEWA to see how campaigns are directly impacting water and energy consumption.

CONCLUSION

In our first study, we explored the current status of social benefit campaigns implemented in Sharjah. The research question guiding our first study was, "What are the social benefit campaigns that have already been created in Sharjah?". We specifically targeted campaigns from AUS and SEWA to observe. We conducted an observational study on the AUS campus to document and analyze the campaign efforts of AUS. We also included SEWA campaigns from 2018. Additionally, interviews with creators of campaigns were held to obtain insight on the design of campaigns designed to change behaviors of the target audience. AUS focused on campaigns that promote sustainability, such as recycling. On the other hand, SEWA focused on water and energy conservation campaigns. Still, both agree and have similar design processes for these campaigns.

In our second study, our design study, we aimed to find a method for designing campaigns with the goal of finalizing three water conservation campaigns. The research question guiding our second study was, "How can we design three creative campaigns aimed to change the behavior of water consumers and encourage water conservation?". The Design Sprint was the method used to generate and prototype creative ideas for water conservation campaigns. The participants of this workshop were members of the AUS community, who were recruited and enrolled by marketing the event on different platforms. The Design Sprint workshop was held for two days and it produced nine campaigns. Each campaign was analyzed and categorized based upon its design elements corresponding to the marketing frameworks: The Hook Model and the Marketing Mix. We created three water conservation campaigns using the prototypes generated from the Design Sprint, which we modified using the elements from the second chapter's findings. Each campaign used a different delivery method, which were a social media post, an app, and an event.

In our third study, we did an evaluation of the three campaigns that were created from the Design Sprint workshops to receive feedback. The research question guiding the third study was, "How will each of three campaigns produced in the Design Study be perceived by Sharjah residents?". An interview was conducted with the same SEWA representatives we interviewed in our first study. Additionally, we surveyed the AUS community and Sharjah residents to get their feedback on the campaigns. For both the interview and the surveys, the campaigns were

presented to these participants, and they were asked to give their opinion on the design, content, and engagement of these campaigns; the only difference was participants generally reviewed only one campaign, while SEWA reviewed all three. From the interview, we learned that SEWA representatives were keen to social media campaigns, using social media influencers, and having a user-friendly designed. The responses from the survey was collected to the Qualtrics survey and categorized into different themes that emerged when analyzing the responses.

NEXT STEPS

Several questions and topics were unable to be explored due to time constraints and the nature of our project. Further research is required to answer the questions, which include:

Several questions and topics were unable to be explored due to time constraints and the nature of our project. Further research is required to answer the questions, which include:

1. What are the short- and long-term impacts of social change campaigns within communities or universities?
2. What is the best method of delivery to target incoming generations?
3. Does implementing a five-day design sprint methodology produce different outcomes than that of a two-hour workshop?
4. What other campaigns have been conducted in Sharjah besides those from AUS and SEWA**?**