



Course 62999 - Innovation Pilot

Proposal report for Engineers without Borders

Lab 5 - Team number:

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1. Introduction to the problem

The problem chosen as the subject for this innovation project, has been with a focus on the theme “Women Empowerment”. Women empowerment can be defined as promoting women’s sense of self-worth, their ability to determine their own choices, and their right to influence social change for themselves and for others. Women empowerment is therefore a very crucial subject and has recently become a significant topic of discussion. Empowerment can be split up into different categories, where economic empowerment is one of the most essential ones. It allows people and in this case women, to control and benefit from the resources, assets, and income.

Women account for around 52 percent of the total population, yet only occupy less than 20% of the elected positions in Sierra Leone¹. This means that their voice, visibility, participation, and representation in the society is very low compared to the men. Some of the reasons causing this issue, may possibly be that the women lack economic independency, a lack of confidence or that they are victims to the traditional norms and customs.

So, why is empowering girls and women so important?

Empowering women is crucial to the foundation and social growth of families, communities and essentially countries. When women are living safely, it creates a breeding ground for a fulfilled and productive life, which will enable them to contribute on a larger scale in building a sustainable economy.

The project presented by Water4Ever and Engineers Without Borders will result in 4 - 5 women becoming economic independent. This is a step towards the right direction, but part of the root cause to inequality is also unawareness. Unawareness regarding the benefits of empowering women, not only the benefits for the women, but for the entire society and this is the essence of the problem that was chosen to work with in this project.

¹ <http://www.usaid.gov/sierra-leone/gender-equality-and-womens-empowerment>

2. Research

Through a thorough desk research, it was concluded that men are still the dominant part of the workforce in Sierra Leone. This is due to the conservative way the society of Sierra Leone look at gender roles. It is also impacted by religion, family, and the general way the social society is structured. These findings led to the identification of the following innovation question:

“How can Water4Ever aid more women to become self-empowered building on the current business model of the water kiosks?”

More research gave a deeper understanding of the issues regarding women empowerment. Not that long ago Sierra Leone was looked upon as a conflict zone due to its blood diamonds and civil war. Women were looked down upon and were meant to do the chores at home such as taking care of the children, fetching water, looking after the elder and cleaning. Women occasionally got raped, and if a woman was pregnant, she was forced out of school. Women not attending school led to the problem that a lot of them couldn't read, write, or do math. Times have changed in Sierra Leone and women aren't looked down upon as they were before, but a lot of women are still stuck without educations. This leads to a problem regarding the screening process used for selecting women to work in the water kiosks. Now women who already owns a business is selected to run new water kiosks instead of women not working or owning their own business. This leads to a differentiation of the local women in favor of women who already have an education and a job.

3. The proposed solution

The proposed solution is intended to mitigate the problem regarding inequality, and has the sole purpose of generating awareness, motivation, inspiration, enlightenment, and determination within the local women communities in Sierra Leone.

The product is a storyboard, illustrating unique women from the local communities, that have succeeded and is now independent. The board will contain narratives that hopefully will ignite motivation in the local communities. The board will include a description of their journey, and a selection of essential tools that can be used to get started, and in the long term become independent. The boards will be manufactured and placed on the walls of every water kiosk owned by W4E. There are currently around 120 water kiosks, which enables this project to have a substantial outreach into the communities.



Creating this board is a solution that appeals to the soft values, which makes it difficult to measure the outcome. Estimating the effect and the impact of the solution is likewise challenging, therefore making the assessment of the investment almost impossible.

Designing a prototype or calculating the cost of production has not been possible due to time limitations. But this is not a project intended to make a profit. This is a project created as an investment in the future, and if successful will bring more stability and awareness in the society.

4. Problem owner

Water4 is a company founded by Terri Greenly and Richard Greenly in 2008. They are co-owners of the company “Pumps of Oklahoma” which is a wholesale distributor and manufacturer of water well drilling, pumping, and cleaning equipment. During their travels across the globe, they found that not everyone has access to clean water and that not everybody has the means to get the right equipment. Therefore, they created Water4 back in 2008 with the mission to eradicate the world of its water crisis. Water4 have a lot of projects all over Africa, but the branch revolving around this project are the one located in Sierra Leone called Water4Ever. The branch in Sierra Leone currently employees 95 women and 28 men. The women are primarily working in the kiosks.

The company’s business model is to make small local enterprises, that can be run professionally and within a short amount of time stand on their own two feet. This is done by making them sustainable and working in coherence with the communities they serve. In this instance the technicians are locals, and the ones working in the kiosks are the local women.

Water4 does not make a huge profit because they believe that everybody should have access to clean water at an affordable price. Therefore the profit is used to deliver a high quality of service, which involves teaching technicians the proper techniques, and are put aside for later maintenance. The goal is to make the enterprise deliver clean affordable drinking water, while keeping financially afloat. Although the company aims to let all the kiosks and nodes to be self-running enterprises, Water4 still owns the piping and kiosks. Therefore, they need to make a profit to keep it all running.

In Sierra Leone, there is only one competitor Guma Valley. The big difference between the two companies is that Water4 cleans the water whereas Guma Valley only delivers the dirty water directly from the well.

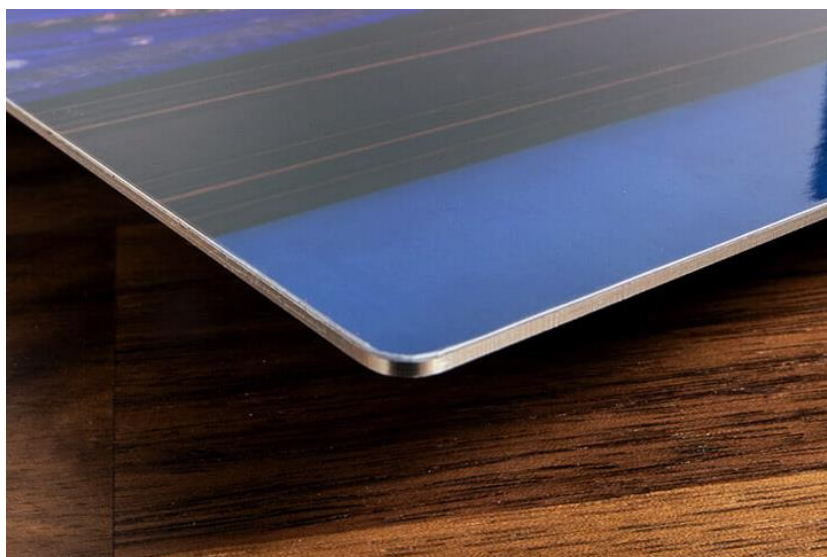
5. Further perspective

Regarding the implementation of the solution the big questing is: *How do we change the gender structure an provide more empowerment to women?* This will be answered shortly in the following section.

The solution is obvious and has been explained, but there is still some work to be done for it to successfully be implemented. First off, before implementation, some equipment and resources must be required:

- White PP corrugated plastic or aluminum
- A computer with Word or PowerPoint
- A camera (Smartphone will do)
- Two women pr. Interview

The essentials for the solution are not demanding which is a part of the solution and the strategy. The production of these boards will be facilitated by W4E, which means that there will be a computer available. The idea is that the board can be designed in PowerPoint or Word, then converted into a PDF and printed on to some white PP corrugated plastic by another company. Another option is getting it printed on aluminium as illustrated by the picture below, which also will make the solution more durable.



Women empowerment is growing when the movement is getting more voices and it is visible in the streets, and therefore the project is not resting alone on what is financially feasible.

The two women who is going to interview the women in Water4Ever, must have an acknowledgment for the fact that women empowerment needs to improve. This is crucial for the project to “survive”, shift the gender structure and get the topic on the agenda. The solution is not just a piece of paper, but a statement of the movement of gender equality that we are experiencing. This will be clear when the storyboards are visible on the water kiosk. This is one of the further perspectives of the solution – and the whole vision behind it.

The women who are going to perform the interviews, must know how to write and read. They can be engaged and employed from the local community. Employing young women for the project may plant a seed for the next generations. This is also part of the strategic opportunities which will benefit the business model by Water4Ever. They have the vision to empower women with more economic independence, and this synchronizes with more women through different generations demanding more equality. Potentially it will give Water4Ever opportunities for new markets to expand their project to, without lacking on vision and labour.

6. Conclusion

In Sierra Leone there are a small village called Grafton with 21.000 inhabitants where 52 percent is women. The community is experiencing a high demand on water kiosks – both with customers and local women who want to become owners. This is part of a project focusing on women empowerment, which this proposal is as well. To improve the inequality between the genders the proposal is supporting the vision of Water4Ever – to give women a chance to become financially independent and place empowerment on the agenda. The solution is highlighting the stories of women who have succeeded in business, and are either kiosk owners, technical specialists or have other jobs in Water4Ever. This is done with big story boards on the water kiosk. The information and stories on the boards are put together by young women who wants to take part of a women empowerment movement. To implement the solution, it will take some work to organize it. Communication will be key, and the project will bring more awareness to the topic and that will plant a seed for the generations to come.

7. Bibliography

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