

Smart Meter Household app Proposal ~ Sustainability

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Arising Problems

1. Energy Crisis

- As seen from the rest of the world, prices are rising and will not stop. With the war, the world realised how bad the situation is. Europe tried to get fuel for energy from other sources but its too expensive due to the scarcity. Power shortages/cuts are being seen throughout Europe more and more often. In Malta this situation is not seen by most due to government subsidies.



2. Water Scarcity

- Water has always been a problem for these islands and it forever will be due to the ever decreasing amount of potable water availability. People seem content the way things are but they do not realise how much we will suffer due to no preparation.



3. Efficiency

- In Malta and Gozo alike (particularly Gozo), we suffer from inefficiency throughout. Nothing in particular , just in general. Some systems of work are still a little old school which sometimes is good, but updating the system and using new technologies streamline processes and make it effortless to work with.

Run-through of the Idea (App)

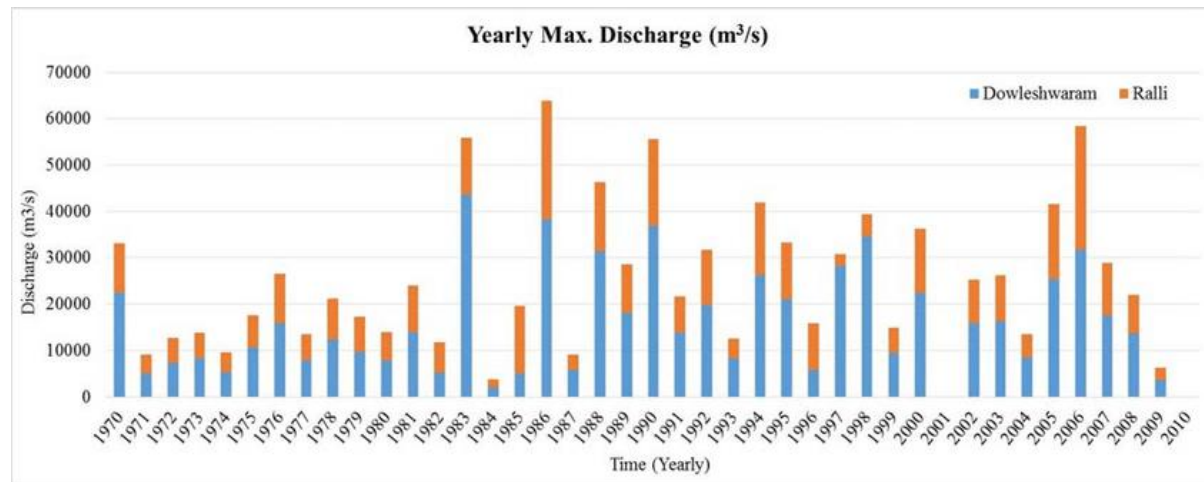
- The problems discussed on the earlier slide were the motivation for us to come up with a way to help.
- The idea is to create an app in which 1 person from each household downloads. This person would then enter the details of the household. (This information will be used to calculate “National” averages)
(This app can be on mobile phones as well as computers/laptops)
- The information of the household will be example; how many people reside in the household, what are their ages and gender, profession, whether any pets or other animals are present, etc...



- On the app, such person would access their own privatised account in which he/she can find the day to day usage of both water and electricity, along with all the water/electricity bills they received.
- The National average will help in reducing the usage of water/electricity because realistically no-one ever compares their bills so nobody knows if they are using too much or not.
- Reducing paper - App will cater for the bills being sent through the post.
- People with multiple properties can have all the properties in the same account and from there they could compare throughout the years which property is consuming more and why.



- The app will have the option to connect to the households solar panels and other renewable energy sources implemented on the house. By doing this, the app will also have all the records of these apparatus.
- These records will help the person see whether their system is efficient enough or whether it is declining with time. Maybe an upgrade is needed but till now you cannot know as the records of the day are lost and unless you are tracking them yourself, you will not know what is still working efficiently.



- The app would also have the option for people to give information about their appliances such as: fridges, air conditioners, tv, freezers, etc... so that the app could give tips on how the household could save more money.
- We will be aiming for this app to give as much troubleshooting, help and encouragement as possible to the household so they would be more green.
- Some options on how someone might decrease his usage will be provided to that household, depending on what information is given.

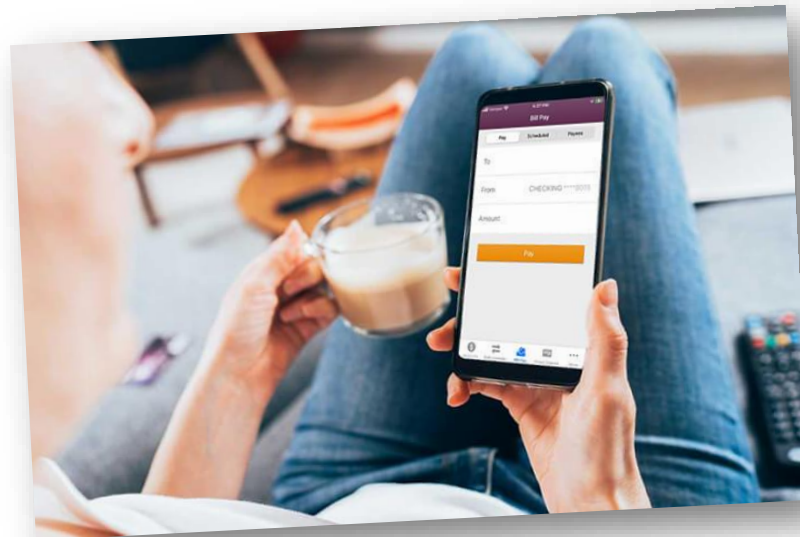


- The app will run on a notification basis. It is the responsibility of the person to check in the app once in a while to see that the day to day usage, the input of the renewable energy and other big appliances are working well.
- However the app will send notifications to the person's phone regarding; a spike in the usage (meaning too much current), or the app wouldn't be getting information from the external sources. Priority notifications would be given to when bills arrive so the person would see it for sure.



Last development (Paying Bills)

This is only an option if a deal with Enemalta can be struck. The app would allow people to pay for all the bills from their phone, they do not need to create a template or to which account they will send them to or even going there in person to pay in cash. The app will eliminate all of these flaws and streamline it. The household would insert an account (be it from any bank) from which the money will be taken from and when a bill is posted, the money will be automatically transferred. Before this happens there will be a notification on the app itself notifying of both the bill and the removal of the money from your account.



Funding



- Another advantage to this app is how easy it is to start, there is little to no funding needed to start building the app, only time.
- Most of the little funding needed would either be achieved by Personal Finance/Bootstrapping or Funding Grants for start-up companies/apps. The other source of income during the research and development of this app would be from Angel investors such as other development companies who like the idea and would help by giving resources such as; human resources (more software developers) or financial resources.
- The fixed costs will include the cost needed to keep the servers for the app running the whole time which is only needed at the very end of the development stage.

Difficulties that can be encountered in the implementation of this idea

- There will be some difficulties when it comes to the implementation of the app as well as advertising it so the public will start using it.
- The app works and can be advertised for use even without the last stage of paying for it, however people will be inputting sensitive information into the server and this information needs to be protected. Safety measures must be put in place.
- Profit can be earned from 3 ways; either advertisements on the app, by selling the finished app or by entering into a contract with a company/government that we will “sell” this app while still being employed to work on it.

Thanks a lot
for listening!



The End