

# Mentor30Engineers

Daniella Franklin

Loughborough University - MEng Product Design Engineering

Email: [daniella.franklin94@gmail.com](mailto:daniella.franklin94@gmail.com)

Tel: 07522420723

## The Problem

With the increasing strain on the NHS, it is extremely important to find new ways of developing sustainable methods to deal with the demands of an increasingly aging population. When analysing the care needs for the older population I believe that social needs are extremely over looked. Humans with strong social connections to family and friends with meaningful interactions on a daily basis are proven to live longer, healthier lives.

As the structure of communities changes with the increase of individualism and globalisation, it has become normal for families to live in different cities and even in different countries. Therefore weakening the vital connections between family members and ultimately reducing the number of familial interactions the older population have.

## The Solution

As an engineer of the future I believe it is crucial to design sustainable systems that will enable better assignment of resources. Taking this principle I constructed a model of how the aging community can support each other. The model was designed after reflecting upon how children are supported financially by their parents to a certain age. I also discovered that the government are trying to find new ways to recover the capital loss that are embedded in fully functional and able people that are retired. This capital for my solution is through the use of their time.

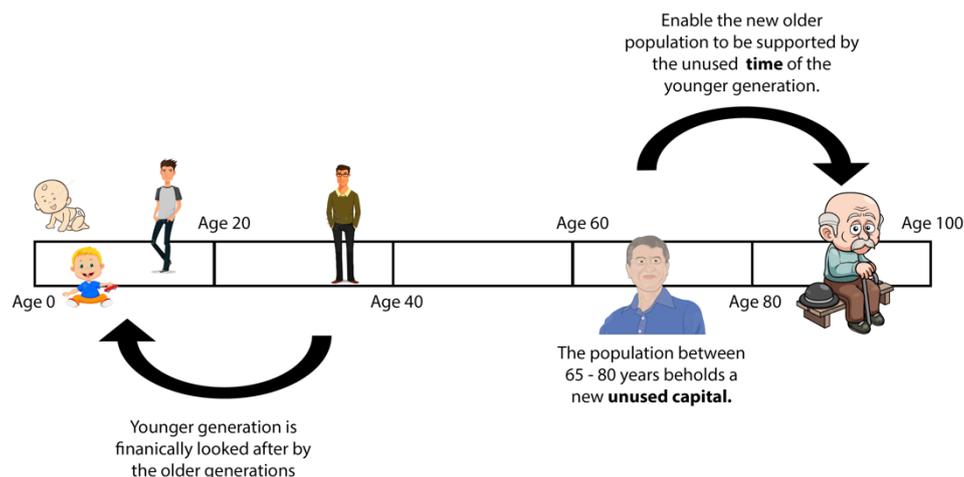


Figure 1: Societal Supportive Model

My blue sky's idea is to connect the older population with the retired population over a common interests or hobbies. Small scale versions already exist within communities like universities where people post flyers with telephone numbers on stating if you are

interesting is having a running buddy call this number. Therefore if this simple model of physically connecting people within communities, can be implemented on a mass scale throughout the older generations it will ultimately help them live healthier lives.

This idea can be broken down into three mechanisms that need solutions to successfully connect people over common interests.

### Mechanism 1

#### ***Get people to get involved***

Making people aware of the service can be done by public campaigns, through social platforms and through community services (doctors, banks, grocery shops). Places with a higher density of the older population. By promoting the health benefits for both parties it will make the act of connecting people synergistic therefore making people more proactive about joining the community.

### Mechanism 2

#### ***Gather data on peoples interests and hobbies that they are involved in on a daily basis***

This can be implemented using trusted websites for the computer literate people and through paper questionnaires for non-computer literate people. The questionnaire will acquire all the relevant information needed to highlight people interests and hobbies that they would be willing to share with other people or want participation with.

### Mechanism 3

#### ***Virtually connect people over a common interest or hobbies***

A specially designed algorithm will be able to connect the right people together and find the right time in which they can participate in these activities with each other. Once the algorithms are discovered a connection will send out the appropriate information to the participants to connect with each other physical. This will either be through an online trusted website or through less technical means like the telephone.

As stated above this service can have a website where it connects people virtual. By using an algorithm similar to Spotify or Amazon it could make suggestions to people to connect with one another that are in close proximity with common interests in real time.

An advantage of using artificial intelligence is that it will learn more about the people involved and become better over time at connecting people to the right people and more intellectual ways can be used to connect people like personality tests.

#### Mechanism 4 (hardest one)

#### ***Physically getting the people into an environment where they will feel safe about participating in any activities***

While this mechanism will be the hardest to introduce, by developing security procedures for people to go through to join the community e.g. based on national insurance number the government can control who is within the online community and help connect people in close proximity to one another.

This solution will always have an underlining risk factor for safety reasons however this can be reduced by registering people on this community through government regulations like using their national insurance number. Therefore this means the service can keep track of the individuals taking part and in what parts of the country. This information can then be feed back into the algorithm to find the other areas to advertise the service and help strengthen its success ratings.

By implementing this system, it will be seen as a proactive approach from the government or health services to help reduce a person's chance of encountering mental issues when they get old and how to help the older population stay connect and active. This community will utilise the lost capital within the retired population by enabling them to use they time to support the older generations of people as well as helping themselves stay mental and physically healthier for longer. This solution does not solve the issue for the physical medical conditions that are increasingly occurring in the older population however over time I believe it will have a positive impact on the mental health of the older population through the increase of positive interactions they are incurring. This service will enable the older population to create their support systems and will help the younger population stay mentally healthier for longer. The ultimate vision for the service is for it to be cyclic as the younger population would transition into the older population and through word of mouth and campaigns newly retired people would be more willing to join the community as they know how rewarding it is for themselves as well as the older population.