Fighting Against Age
Group ID: 10-10
Future Trends Written Report
Based on Analysis of the Future Scene in Mid-Term and Final
Evaluation

Challenges identified from the Future Scene

Challenge #1: Loneliness of the elderly.

The future scene states that "She has been so used to be alone, even though she yearned for her children to visit her" and "Maybe she is too used to being alone". This shows that elderlies are lonely as they are alone most of the time without the company of their family or friends. This could lead to depression and could affect their sleep quality, cognitive level and ability to perform their daily duties. This may be a problem because many elderlies will not enjoy their last years, hence increasing rates of suicides and higher levels of dissatisfaction. A study by Singapore Management University has found that social isolation puts elderlies at risk of developing depression and could affect their sleep quality, cognitive level and ability to perform their daily duties. The team tracked 46 seniors, aged 61 to 93, who lived alone in Marine Parade. Seven seniors showed signs of being isolated socially and emotionally.

Challenge #2: Elderly's distrust in technology/slow adaptation to technology.

The future scene states that "She told Jason that she didn't want the device in the house, that it made her uncomfortable". The future scene shows the elderlies distrust in technology and slow adaptation to it, this could lead to elderlies not being able to perform many daily tasks using advanced technological devices. This may be a problem because the elderlies will no longer be independent and will not have knowledge or skills in operating newer technology, hence, leading them to lose jobs to the younger generation and needing to have someone accompany them at home at all times, placing a heavier burden on their children(if any). As it is, many seniors have to rely on others, including their children or more tech-savvy peers, to navigate the increasingly digital environment. This shows that the elderly do not trust the technology that we currently have. Many elderlies are reluctant to adapt to newer technology, e.g devices, facilities. As seen in the interviews, Many of them said they would rather spend time queueing at bank branches to carry out a simple banking transaction, than to learn to use mobile or Internet banking.

Their reluctance stems from a fear of being scammed or accidentally racking up exorbitant purchases as they are unfamiliar with using the apps or websites.

Challenge #3: **Inadequate and insufficient healthcare facilities for the elderly.**
The future scene states that "Even government hospitals today are plagued with long queues, expensive healthcare costs, extremely limited bed space, exhausted medical staff, and this is already with heavy investments from the government". The future scene shows inadequate healthcare facilities in the country and this could lead to many elderlies having poorer health and longer waiting time to see a doctor. This may be a problem as more elderlies will succumb to viruses and health problems (etc),hence, many elderlies will pass away earlier and life expectancy will drop. There is lack of staffs in hospitals and other healthcare facilities as an aspiring nurse will want to go to a much larger institution, where the work is perceived to be more sophisticated and there are better laid out career plans. This may be a problem because lesser nurses will want to serve at public hospitals, hence, leading to a shortage of manpower. As a result, the government has improved the nurses and doctors salary to convince more of them into working for public hospitals. Pre-employment training pipelines such as scholarships and bursaries allow for junior staff to be matched to a workplace, while very senior doctors are "up for the challenge" of managing a new outfit. However, doctors in the middle are harder to convince as they may be happy in their particular positions.

Challenge #4:
Risk of dementia for the elderly. "She knows far too many people who were cooped up at their home all day, leading to degeneration of the mind and eventually dementia".The future scene mentions many elderlies developing dementia and this could lead to the elderlies having trouble doing daily tasks (forgetting to do things etc). This may lead to relatives staying home to take care of elderlies who have dementia,hence, the workforce may shrink and our economy will be affected. Many of the elderly in Singapore have dementia, according to a new nationwide study. In 2012, about 28,000 people in Singapore aged 60 and older had dementia. The number is expected to soar by 2030. Stroke, obesity, diabetes and hypertension are also risk factors of dementia. As more people turn old, we will encounter more dementia cases. At the current prevalence rate, we can expect the number of cases to increase by more than double, to about 45,000

people by 2020. However, people who keep mentally and socially active are less likely to develop Alzheimer's disease. However, many elderlies are used to staying at home most of the day as stated in the 'Elderwatch Scenario'.

Challenge #5: Jobs being taken from elderly with automated/advanced devices in their jobs. The future scene states that "Two of her colleagues had already been made redundant by tray-returning robots". The future scene shows that automated and advanced devices/machineries will take over elderlies' jobs and this could lead to many elderlies losing their jobs. This may be a problem as the elderlies may not have enough money or keep themselves occupied,hence, their children(if any) will need to work more in order to help support their parents or accompany them. Robots will have taken over many jobs by 2048, leaving humanity facing its 'biggest challenge ever' to find meaning in life when work is no longer necessary, according to experts. Many elderlies will be replaced in their jobs as cleaners, cooks etc that requires physical work. Existing robotic and AI technologies are already eliminating a growing number of middle-class jobs and pace of advancement in the field of Artificial Intelligence (AI) is increasing. Many robots and AI will then replace the elderlies in many jobs as they are able to do the job more efficiently than their human counterparts.

STEP 2. Select a Fundamental Problem

Underlying Problem:

Because many elderly live alone, they tend to feel lonely without the companionship of their family members or their friends. As many of their friends have passed away and their children are busy with their work, in what ways might we help them feel less lonely so that they will enjoy their last years?

STEP 3. Produce Solution Ideas

Solution 1: Building elderly-only flats

Many older people who move in to retirement villages find the experience so positive that their final years are transformed.Building elderly-only flats. Instead

of building retirement villages, we can build retirement HDB flats (as we do not have land space)for the elderly and anyone above the age of 65.Every flat will have be able to accomodate the elderly's needs like a hawker centre downstairs for food etc. There will also be an office at every block to assist the elderly e.g emergency. The flat will also have elderly-friendly appliances like e.g(pulling string in case of emergency, staircases or elevators will be locked to ensure elderlies safety.) There will also be organised events and tours for elderlies.

Solution 2: Humanoid robots (Best researched solution)

We can create a humanoid robot to accompany the elderly at home during the day. Robots can be a conversation partner for many of the elderlies and will make their lives more fun. Many robots can also help many elderlies run daily errands like cleaning the house, cooking, receiving a call etc.However, Plenty of obstacles may hinder a rapid proliferation of elder care robots: high costs, safety issues and doubts about how useful /user-friendly they will be.

Solution 3: Public Gardens/Pet-caring services (most original solution)

We can start Public gardens or pet-caring services for the elderlies
Tending to a pet or gardening can keep them busy and satisfy their urge to care and nurture. These are also proven to be efficient ways of combating depression.Petting and interacting with a dog, cat or other animal can relieve stress, and animals can also lend a listening ear to lonely people. While isolation can make disorders like depression worse, simply scratching a cat's ears or talking to a dog can be therapeutic and boost a person's mood.

Solution 4: Nutritious-meals provider

We may be able to start a Nutritious-meals provider to provide nutritious yet delicious dishes for the elderly. A good/healthy diet prevents many diseases from happening like heart and lung diseases, diabetes, high-blood pressure, strokes, memory deficit and many more.In order for the meal-provider service to expand, we may need to charge the elderly a small sum of money for a meal, e.g $2-$4

Solution 5: Organising Field trips

We can also organise field trips for the elderlies.

They are able to learn new things and keep physically active when they go on field trips. They will also be able to socialise with other seniors that go on the same field trips as them. The elderly will also be able to go places that they may not have been to before like e.g gardens by the bay, ArtScience museum.This would also allow them to relax and get away from loneliness.

STEP 4a: Select Criteria

Cost: We need to consider cost as money will be needed to implement the ideas. However, cost is not very important as we need to do whatever we can to help elderlies combat loneliness.

1. Cost: We need to consider cost as money will be needed to implement the ideas. However, cost is not very important as we need to do what we can to help lonely elderlies(whatever the cost)

2. Effectiveness: Effectiveness is the most important considering the fact that we need something to be effective so that it will have a long-term impact on the old folks in Singapore.

3. Possibility: We need to consider the possibility as our idea needs to be realistic in order for it to be implemented. This is our second most important criteria.

Criteria	Cost	Effectiveness	Possibility	Total
Weightage	1	3	2	
<u>Building elderly-only flats/villages/ apartments</u>	2	3	3	**<u>8</u>**
Humanoid robot	1	3	2	6
Public gardens/pet caring services	2	2	3	7
Nutritious-meal services	3	3	2	7
Field trips	2	2	3	7

Building elderly-only flats/ apartments/ condominiums/ retirement villages

The idea of elderly-only flats are common in the United States(US), New Zealand, Australia, and recently catching on in the United Kingdoms(UK). In such villages, you can buy or rent your own apartment, but have access to dozens of basic support and care services as you need them. It is so good that many older people who move into such villages find the experience so positive that their final years are transformed. Instead of building retirement villages, we can build retirement HDB flats/condominiums/apartments(as we do not have land space) for the elderly and anyone who has retired. Every flat will be able to accommodate the elderly's needs, like a hawker centre downstairs for food etc. As this may be implemented in the far future, this will of course, have futuristic elements. Each apartment will have a humanoid robot which will be there to assist the elderly in anyway. From changing clothes, to online shopping to helping the elderly move around. If they were to fall ill, the robot will check their body and diagnose their disease(s). Depending on the severity of the illness, the robot will inform a nearby hospital or get the elderly to go to the clinic that is also part of the flats' facilities. There will also be public gardens and facilities within the residence so as to be more elderly friendly. Residents can bring their own furniture, decorate as they wish, and are free to have friends and family come over to stay. Most of the flats will allow pets to come too. They can also pay for care and support services, which are on-site, as and when they need them. They can get help with everything from shopping to assistance with washing or getting dressed.

Pat Wood moved into Hagley Road Village in Birmingham two years ago, and loves it. "Whoever came up with the idea excelled themselves," she

says. "In my mind it's what the future holds." There's a busy social scene here too. Activities include everything from tai chi to abseiling, while Kiki Dee will be playing in the bar in a few weeks' time."Everybody talks to you. It's aptly named a village," says Pat. This shows us that the elderly and retirees often report high levels of satisfaction with this excellent idea of having elderly-only flats/ apartments/ condominiums/ villages.

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