Future Trends Report
Based on Analysis of the Future Scene in Mid-Term and Final Evaluation

STEP 1. Identify Challenges

Read the Future Scene carefully and generate ideas for challenges, concerns, and possible related problems. Choose the 5 most important challenges and write them in the space provided. Include applicable research with appropriate in-text citations.

Challenge #1:

Focus: Unhealthy workforce (Psychological)

The future scene states that there are less subsidies than expected from the government in the support of elderly. This could be problematic in the future because the family members who are working to support the elderly may face greater stress as a result of the increased financial burden, which could potentially lead to poorer psychological health, for example depression, in working adults.

According to an article from Money Management International, researchers have repeatedly found a clear link between mental and financial health. In many instances, that link is cyclical – increasing financial burdens leads to poor mental health, which leads to increasingly poor financial health, and so on. But researchers have also concluded that mental health issues – including depression, and anxiety– are three times more likely to occur when an individual is in debt. Hence, the working adults may get too stressed out and depressed trying to support their families. Singapore is the most expensive city to live in the world. Why? According to a BBC Article, the main factors are the COE for cars and flats, and the high amounts of taxes charged on items such as petrol and alcohol.

If taxes continue to increase and the government do not step in to ease the insufficient subsides on the elderlies' medical bills, more burden would be put on the working adults as well as the elderly.

Challenge #2:

 Focus: Psychological health

The futuristic scenario states that automation such as tray-returning robots may cause more and more elderly to lose their jobs and fall into isolation. This may reduce their social interaction with others which may lead to mental illnesses such as dementia. More financial burden would be put on the working adults as they may have to bring their elderly parents to see a therapist or hire a maid at home to take care of the elderly, which will incur more bills.

More and more of the elderly are indeed living alone, as shown in the table.

From the table adapted from Ministry of Health, study shows that the number of Singapore residents aged 65 and above living alone had been escalating from 2012 to 2016. **This trend already proves how many elderlies are alone at home, and if the trend continues, the large number of elderlies which may result in much higher rates of dementia.**

According to a CNA Program, 'Singapore's Elderly Poor', Mdm. Helen Fernandez, 89 lives alone in a one room HDB flat. She has fought depression by herself and is starting to see effects of dementia.

Challenge #3:

Focus: Communication + Isolation

From the futuristic scenario, the worker from the Silver Generation Office approached Mdm Lee and her neighbours one by one outside their houses, but had been rejected by all of them coldly. A problem that may arise is that elderly may not want to accept help from such social workers as they are too used to their routine and staying alone as showed by Mdm Lee in the scenario, or think they are capable enough to take care of themselves. Thus, many of these social services that target the elderly, some of which are funded independently, might have to be taken away due to low take-up rates if this continues. According to agingcare.com, in 2009, approximately one in five American seniors (age 75 and older) needed help with daily activities, including shopping, handling finances, managing medications and performing household chores, according to the National Centre for Health Statistics. The problem is that older adults are often resistant to receiving assistance from their grown children - even or sometimes especially when they desperately need it. After a series of in-depth interviews with seniors, their adult children and hired caregivers study author Michelle Barnhart and her colleagues concluded that many adults are offering assistance in a way that makes their parents feel, "old." In America, going grey is regarded in a distinctly negative light, which goes the same in Singapore because elderlies are elderlies. We equate advancing age with a host of undesirable traits, including dependence, forgetfulness, confusion, disengagement and a lack of productivity. It's no surprise that few adults - even those who are technically "senior citizens" - actually categorize themselves as being old. When their identity is threatened, older adults may result to such behaviour - shying away from the society and social services, as they want to prove their youth and show that they do not need the government's help and are independent enough.

Challenge #4: Focus: Financial Difficulty

The working generation is struggling to make ends meet financially, due to rising tax rates and the shrinking workforce. In the futuristic scenario, Mr. Jason had to pay $900 for using the Elderwatch sensor for just 3 months, and to add insult to injury, tax rates were increasing as the population of seniors increased and the workforce shrank, placing more burden on adults like him. Rising tax rates mean that businessmen like Mr. Jason will have to pay more tax to the government, with less money for other needs such as the sensor. The workforce shrinking will also lead to more competition to jobs. According to a news article from Singapore Business Review, 46% of Singaporeans holding executive positions claim their salary do not leave them with any savings are spending on essentials. If the tax rates were lower, businessmen may not have such a tight cash flow.

Challenge #5: Focus: Elderly's Redundancy + Financial Difficulty

Automation is removing jobs of elderly, reduces financial ability of elderly to take care of themselves and this may increase burden on family members who take care of them, especially with rising costs. The futuristic scenario states that two of Mdm Lee's colleagues at the food-court had already been made redundant by tray-returning robots. With no jobs, the elderly will have to rely on their children to support them, increasing the financial burden on the working adults. Even though the elderlies' pay may be too little to make a significant difference, it still helps to reduce the adults' burden. According to an article from Five Stars and a Moon, 90 per cent of respondents felt that working after retirement is a good way to stay financially independent. Hence, having a job is better than staying at home and doing nothing, which may lead to mental illnesses.

STEP 2. Select a Fundamental Problem

Using the challenges listed in Step 1, identify a problem of major importance to the Future Scene situation. Write your Underlying Problem making sure your question clearly explains the action that will be taken and the desired results/goal of that action.

Incorporating Challenge(s) <u>#1 and #3</u>

Underlying Problem:

Given from the futuristic scenario that the elderlies are cooped up at home and do not have anyone to accompany them, the inference from the futuristic scenario that the elderlies are suffering due to psychological problems, how might we improve mental health of these elderly so that they will not succumb to mental illnesses such as dementia and depression that easily in the current year and in the future?

STEP 3. Produce Solution Ideas

Generate solution ideas to the Underlying Problem in Step 2. Choose the 5 most effective solutions and write the elaborated ideas in the space provided. . Include applicable research with appropriate in-text citations.

Solution #1: We, the Stay Vigilant Society, will use a camera system, have family members and/or security guards watch over an elderly person. This will have the elderly feel more secure at home knowing that if anything were to happen, help would be quickly administered. The cameras will be like CCTVs, except being 'intelligent'. Sudden, quick unexpected movements will notify the people in charge. Elderly people are commonly feeling insecure as their bodies are not as strong and anything that happens can cause severe damage. Having this system will ensure that the elderly feel safe and also increase the emergency response time. This will help to reassure the elderly and will help to reduce the number of elderly succumbing to mental illnesses.

Solution #2: We will implement a program "Adopt an Elderly" to let groups of citizens adopt elderly members. This does not mean that the family that chooses to adopt the elderly has to stay with him/her forever, it will allow different families to accompany an elderly person, say taking turns. The elderly who are mostly isolated at home will have company if their children are on business trips, etc. This would also build good bonding and relationships between the elderly and families around the neighborhood. According to psychologists from the University of Chicago, loneliness has been shown to lead to depression, and furthermore is related to suicide. Thus, having the lonely elderly group up with healthy families is beneficial for both parties.

Solution #3: We can work with technological companies to create a software that is elderly-friendly and readily available in order to allow the elderly to socialize with one another online. We will make an online social platform for elderly to socialize. There are different interactive modes like virtual reality Chinese chess, Taichi and other platforms suggested by the elderly. It is shown that being more social is good for your brain's health, improving memory and cognitive skills, also making it less likely to get dementia. Living a longer life has also been trending to those who have more active social lives. The elderly will no longer be bored at home and will be able to socialize from the comfort of their homes. According to Angela K. Troyer Ph.D., C.Psych, though not officially proven by science, there has been accumulating evidence that socializing is helping your brain, reduces risks of dementia and depression. People who socialize also tend to live longer!

Solution #4: We can create new jobs that do not exist today which will be more suitable for senior citizens. For example, instead of a janitor sweeping / mopping the shopping mall / school assembly hall manually, he can be trained to drive a mopping machine which will help him complete the job 3 times faster, or instead of manually washing the toilet and removing clogging of the cubicles, he can be trained to operate a machine which helps him do the job, making his job less tedious. In the near future with the technology advancing, there would be many machines created which, as many people say, 'removes jobs', but they do not necessarily have to remove the elderlies' jobs. Imagine a tray-cleaning robot moving around the food court, collecting used plates and cutlery, customers may not want to eat out as they are uncomfortable with the robots as no one is looking over them and they may malfunction. With the elderly there, their jobs would be easier and would not be removed.

Solution #5: We will work with the Ministry of Manpower to increase the retirement age from 62 to 70, to ensure that the elderlies are occupied with a job to reduce the risk of mental illnesses, and also to make them feel they are contributing to the society. Elderly like to work for various reasons: they want an income to support themselves independently; if they stay at home they are afraid of getting Alzheimer's disease or dementia so they want to occupy themselves; or they want to feel useful and contribute to the society. The elderlies also have lots of life and work experience and they can impart their knowledge to the younger generation and contribute to the society. However, the retirement age of 70 will not be compulsory for everyone, if the elderlies cannot work due to medical conditions and so on, they will not be forced to. According to a news article from The Straits Times, many seniors are working beyond retirement age – some into their 80s and 90s, but some need the money to survive, while others work to stay mentally and physically active.

STEP 4a. Select Criteria

Generate criteria to determine which solution idea does the best job of solving your Underlying Problem and/or addressing the Future Scene situation. Select the 3 most important criteria for measuring solution ideas and write them in the spaces provided.

Criterion #1:
Which solution will be the **fastest to implement to improve** the **elderly's mental health so that the risks of the elderly succumbing to mental illnesses such as depression will be greatly reduced?**

Criterion #2: Which solution will be the **most efficient to provide company for the elderly so that they will not feel so bored or helpless and can have something to brighten up their days?**

Criterion #3: Which solution will be **cheapest to implement to organize online activities for the elderly as pastimes** to **increase the social and physical interaction between the elderly?**

STEP 4b. Apply Criteria

List the solution ideas from Step 3 on the grid. Use each criterion to rank the solutions on a scale from 1 (poorest) to 5 (best). The weighting for one important criterion may be doubled if necessary.

Step 3 Sol'n #	Solution Idea	Criteria 1	2	3	Total
#1	Use a camera system, have family members and/or security guards watch over an elderly person.	4	3	5	12
#2	Will implement a program "Adopt an Elderly" to let groups of citizens adopt elderly members.	3	4	3	10
#3	Create the Elderjoy software that is elderly-friendly and readily available in order to allow the elderly to socialize with one another online	5	5	4	14
#4	Create new jobs that do not exist today which will be more suitable for senior citizens.	1	2	2	5
#5	Increase retirement age from 62-70 so that the elderly will be occupied.	2	1	1	4

STEP 5. Develop an Action Plan and Evaluate its Feasibility

Develop your top-scoring solution idea into an Action Plan. Thoroughly explain how the Underlying Problem is solved, how the plan will be implemented, and how the Future Scene will be affected. Explain how this Action Plan is feasible with research consulted.

Writing on the reverse side or in margins will not be scored.

Action Plan derived from Solution #3:

We, the will create an elderly-friendly software, called Elderjoy software, which will help the elderly to socialize with others online, and ultimately improve their mental health and reduce the risk of them succumbing to mental illnesses such as dementia and depression, which is our underlying problem. There are different interactive modes like virtual reality Chinese chess, taichi and other platforms suggested by the elderly. We will start by sending our surveys for information and get the public's opinion. We will at the same time start working with technological companies to test out new and better features. After that we will do a beta test run on the software. After spotting our bugs and fixing them, we will finalize it by sending representatives or volunteers from nearby community clubs to go door to door and show them the advantages of the software. The final result will help improve their socializing skills so they will not feel lonely and will be less likely to succumb to mental illnesses like depression. The Software will help to improve the elderly's brain stimulation, and can help to improve their memory and cognitive skills, all this leading to the decreased likeliness to them falling ill to illnesses like dementia. To enhance the elderly to want to use it, we will add in a reward system so that if use the software more, they could earn reward or discount vouchers which would appeal to them It is shown that being more social is good for your brain's health, improving memory and cognitive skills, also making it less likely to get dementia. Living a longer life has also been trending to those who have more active social lives. The elderly will no longer be bored at home and will be able to socialize from the comfort of their homes. A study also shows that more than 22 million people are experiencing VR in the US and that figure is estimated to grow to 49 million by 2019. What does this mean? It means that the elderly should learn to try out new technology which can solve the underlying problem
Thus, in the future, the elderly would be more sociable and less elderly would succumb to mental illnesses, increasing their mental health.

(Action Plan Continued)

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(Action Plan Continued)

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Cite the resources you consulted using the APA format.

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