Future Trends Report
Based on Analysis of the Team's Chosen Community / Organisation in Mid-Term and Final Evaluation

Community / Organisation Studied:

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

People who do not know how to use technology may suffer from these changes. The older generation might not be able to keep up with the new technology implemented, and might face troubles when using the self check out kiosks, as they might not be able to understand the instructions. They would be unable to keep up with the times, which might lead to more online scams. The elderlies might also reject the use of technology, deeming it as too troublesome. Researchers from Lancaster University found that personally held values to do with the desirability of technology, wider concerns regarding its impact on society, and fears of getting things wrong when using software are also significant factors holding back technology use among older adults.

Some older people are put off using online tools because they see them as being arduous and time consuming. They feel that the trend toward online services such as comparison websites places a greater burden on themselves to become experts in all manner of things, whereas previously one could seek out trained professionals to assist with decision making. Not to mention that security concerns were omnipresent among the older adults interviewed, with many of them lacking confidence in their own knowledge of how to use online tools properly, in particular online banking.

Challenge #2

Lack of sociability. There will be less face to face interaction between the shopper and the retailer, customers may not be able to receive the best products in the shop that is the most suitable for their needs, they will only get a variety of products they can choose from without knowing which is the best one for them and conversing with retailers that are experienced and specialises in this Industry and what it consists of despite the cost reduction. Those are the findings of a new survey, which showed that as millennials spend more time engaged on social media platforms, it's causing them to be less social in real life. The study, conducted by Flashgap, a photo-sharing application with more than 150,000 users, found that 87 percent of millennials admitted to missing out on a conversation because they were distracted by their phone. Meanwhile, 54 percent said they experience a fear of missing out if not checking social networks.Nearly 3,000 participants were asked about how they felt about social media in social settings, and found that the guiltiest culprits are often females. The study found 76 percent of females check social media platforms at

least 10 times when out with friends, compared with 54 percent of males.The most commonly used apps mentioned in social settings among millennials were Snapchat, Tinder, Facebook, Messenger and Instagram.

Challenge #3

Huge decline in available jobs. It has been predicted that **5 million jobs to be lost by 2020** by the World Economic Forum, with rapid advancements in the fields of technology, such as artificial intelligence and machine learning, and in how we create things, such as robotics, nanotechnology, etc. will dramatically change the characteristics of the global workforce. Workers who find themselves equipped with the latest skills sets, such as coding and machine engeniering will find themselves at a benefit while the older workers may have been 'outdated' and have to learn all the new skills again. This makes it harder to find jobs. A.I. will also take over many jobs in the industries as they are more efficient and cost effective. For example, a worker working at a factory might no longer be needed as A.I. can do their job with more precision and accuracy.

Challenge #4

There will be a Lack of Privacy as the Internet and many social networking sites encourage people to be public about their personal lives. Our intimate details can be posted easily and they remain available indefinitely. Even though most websites allow users to control who sees the things they have posted, such limitations are often forgotten. It is estimated that the problem with lack of privacy will only get worse with the further development of technology. The problem is the fact that users themselves do not have a great sense of privacy. Nowadays, users are becoming increasingly unaware of the information websites collect. For example, you might be sharing your IP address whenever you go online. Not only that, search engines, such as Google, knows which operating system you're running, what CPU and GPU are you using, the screen resolution and the browser plugins you've installed. Internet providers, which can now legally collect and sell your browsing historywithout your authorization, also let advertisers know; who you are,where you've been,who you've been talking to andwhat you're interested in. This information can be then sold to other third party companies. A good example of how this works is advertisements you see. In most social media apps, like instagram, the ads are personalised based on who you are following, which posts do you 'like' etc. With this information, they use keywords such as 'games' or 'fashion' , and display ads matching those keywords. With the new A.I. software systems, and as they become more and more prevalent in our lives, they will collect even more information, for example even your sleeping habits, so one can never truly have privacy online.

Challenge #5

Misuse of such Technology. This has dire conscequences as Hackers or potential criminals may utilise loopholes or the power of the systems to illegally spy on others, steal government secrets. Drones for

example can be used as weapons, and several A.I. software, such as writing realistic texts on paper can be misused. This could lead to forged signatures and you can find yourself framed.Governments militaries and law enorcement agencies have been reached out by researchers and specialists to acknoledge the ethical boundaries and moral values.

STEP 2. Craft the Underlying Problem

Using the challenges listed in Step 1, identify a problem of major importance to the chosen community/organization in the future. 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)
2 and 3

Underlying Problem:
In the Year 2030, Artificial Intelligence will dominate most of the physical jobs of the Retail Industry, following the Fourth Industrial Revolution. Given that most companies in the retail industry will lack **human touch** due to the robots having all the jobs as they are more convenient and efficient than humans can ever be, we want to incorporate human touch into the retail industry amidst all the AI to provide an authentic and fruitful human interaction between customers and retailers.

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

C - Customer / Convenient

H- Hotline (Customers who are not tech-savvy or have queries can ask the workers through hotline)

A- Attend (Workers to Guide and attend to customers)

P- Purchase (Convenient Purchase For Customers)

T- Travel/ Technology

E- Efficient (Fast delivery/ Cost Efficient)

R-Recommend (Programmed to have different categories with travel accessories suited for the Customers Travel Location)

It is a website designated for people all around the world (Expand Travel Store's business while saving money), there would be different categories for customers to choose from once they enter the website. E.g. Negative Temperature / 1 to 10 Degrees / 11 to 20 Degrees / 21-30 Degrees / 31-40+ Degrees and they can purchase suitable travel accessories suited for their locations. Customers who have queries can dial a hotline with workers specialised to answer their questions if they are confused.

Solution 2

Robot capable of transmitting the voice of an employee from somewhere else, installing a robot in the shop with a voice transmitting system connected to a hotline that the company has made, allowing the customers who have queries to ask a real human on the other end of the hotline for help in making their decisions, such as recommending them products based on their needs and answering questions that they raise. This allows the customers to recieve useful suggestions based on their queries

Solution 3

Educating the workers to be more technologically savvy and learn programming, giving them the new skills sets needed to embrace the change and allow to be more effecient when dealing with AI. For example, those who learn programming skills can work on the companies webpage or the codes of the robots while those learning the engeeniering of the robots can help maintain and repair the robots.

Solution 4

Fully technologically used system operating in the stores. There can be self check out kiosks, A.I. with an algorithm desgined to respond to the customers needs. Also it is fully operated by machines and systems so that there will be no manpower needed at all. The algorith can use a human voice and converse in different dialects and languages fluently. The reccomendations can also be from the retailers. Only 1 person is needed to be stationed in the store instead of the normal 3 and her role is only to resolve technical difficulties and guide the customers on how to use the machines.

Solution 5

VR application that uses VR headsets to allow a immersive experience for the user to technically 'be in the store'. The VR experince allows users to key in keywords of items that he/she is looking for. She can then look at the displays and even try them on, and the products used online are definitely guranteed to be the same as those seen online. They can also interact with a shop assistant as a hologram in the same world. This allows the user to be able to try the products first hand, and have the producted delived to them quickly.

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 5 most important criteria for measuring solution ideas and write them in the spaces provided.

Criterion 1
Cost Effectiveness

Criterion 2

Rate of unemployment

Criterion 3
Convenience of the company

Criterion 4
Convenience of the shoppers

Criterion 5
Inclusiveness of the human aspect

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					Total
		1	2	3	4	5	
#1	**Project Chapter**	3	3	1	4	3	14
#2	**Voice Transmitting Robot**	1	2	4	2	2	11
#3	**Educating the workers to be more technologically savvy**	5	5	2	1	5	18
#4	**Fully technologically used system operating in the stores.**	2	1	5	3	1	12
#5	**VR Store**	4	4	3	5	4	20

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 community/organisation will be affected. Explain how this Action Plan is feasible with secondary research consulted, preferably also with primary research (feedback from chosen community/organization)

We are going to use Project: CHAPTER to create a website, where customers will have easy and convenient ways of buying items they need from a shop, with AI assisting them with algorithms to help customers find what they need in

the website. Furthermore,the website will help to incorporate human touch as it will have a hotline where customers can have an authentic human on the other end of the line give recommendations on products in the website.

it is able to harness the advantages of A.I. and can adapt to the rapidly changing world. Retailers will not have to lose their job as they can now become deliverymen or online assistants/recommenders. By making it more digital, the company can also cut down on rent for stores which are less crowded. An algorithm can also be designed such that the website can give recommendations regarding different climates and times based on data collected. For example, if they are traveling to colder regions during late December, the A.I can correctly give recommendations on certain products such as a winter coat for them. Users can also choose to apply several different factors, such as price range or size.

However we have decided to improvise on our action plan and have thus came up with a new one:

We have decided to give the customers a hands on experience by using a Virtual Reality type of program. For example, when a customer wants to see how he or she looks like with a shirt from the online shop, they can see it through the VR. We are also including human touch by letting the store employees use the VR and will also give recommendations through it. We will start the plan just limiting to the Travel Store, then reaching out to the rest of the Retail Industry by the Year 2030. This helps to save money for the company as there wouldn't need to be so many physical stores, and helps to embrace the digital age and keep up with its competitors.

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Cite the resources you consulted using the APA format.

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