

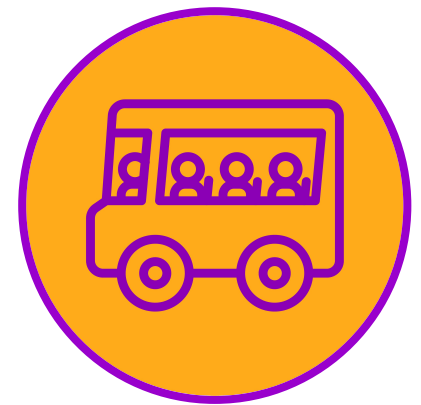
Theme 3: Living Together

We are presented with more and more options that can help us move about, access vital services and supplies and stay connected to each other.

How can we use technology to help us live together and stay connected in a way that is easy, safe and environmentally friendly?

In this pack you will find:

- An overview of the theme.
- Examples of the opportunities and challenges within this theme.
- Probing questions and sub-themes to help you think about how technology can be used within this theme.
- Case studies of real examples of how technology is helping issues within this theme.



Transforming how we live together

It is more important than ever to find ways to stay connected and safe, build communities and help the most vulnerable people in our societies.

On the next page you will find some of the challenges we face as well as the opportunities in trying stay connected and safe.

You can also take a look at our other themes:



Theme 1 Living Longer



Theme 2 Living Better



Theme 4 Living Greener

Building Communities

Challenges

Communities, both digital and local, help us stay connected and support each other. Issues such as increasing loneliness, and homelessness have all been worsened with the impact of COVID-19. We have also seen many people respond by reaching out to each other and strengthening their communities, but many have limited resources.¹



How can technology help?

- How could tech be used to connect people and reduce loneliness?
- Can we use technology to help with issues such as homelessness?

Disaster Response and Relief

Challenges

The frequency and intensity of natural and human caused disasters is increasing world wide.² Disasters affect those living in poverty and more vulnerable people most heavily.



How can technology help?

- Can technology be used to help predict natural disasters and keep the public informed and prepared?
- Can technology help us respond to disasters and emergencies better?

Access to vital services and supplies

Challenges

Since the beginning of the COVID-19 pandemic, access to vital services and supplies are becoming increasingly important and difficult for many people.



How can technology help?

- How can technology change the way services and supplies are provided?
- How can technology make vital supplies and services more accessible, cleaner and more efficient?

Safety and Accidents

Challenges

Globally between 20 to 50 million people are injured in car accidents each year. The majority of these accidents are caused by human error. ³

Safety in public transport is a major issue for people all across the world, especially groups like women, people with disabilities etc.



How can technology help?

- How could tech help make travel safer?
- Could we use tech to monitor and analyse data in a way that would help us create safer ways of moving around?
- What information would help keep people safe as they travel?



Better transportation



BICO - Bike Sharing Schemes



Watch this short explanatory [video](#) (2:00 min) from BICO

Bike sharing schemes are a great way to get people cycling in urban areas.

In short, a bike sharing scheme is a service in which bicycles are available to rent or for free for single short term rides. Most schemes allow people to take a bike from a dock (a special bike rack) and then return them to another dock, although increasingly you can park shared bikes anywhere, and find them using smartphone mapping apps.



What are the challenges Bike Sharing Schemes are trying to solve?

Road congestion, air pollution, capacity/overcrowding and reduce cost of transport to individuals.

How is technology being used to help?

Machine Learning

AI is helping to make bike sharing technology available by predicting demand based on weather and past use patterns, bike sharing companies can ensure there are enough bikes available.

Machine learning algorithms are useful to bike sharing schemes,

Building Community



MyPass Digital Identity Project - Helping homeless people access services



Watch this 2:03 min [video](#)
Read this [article](#)

Path Finder is designed to enable people suffering from Parkinson's to walk with confidence on their own. It is a laser shoe attachment that provides visual cues that have been shown to help with walking.



What are the problems they are trying to solve?

There are many problems faced by those responding to a disaster, most notably:

ID: Traditional forms of ID usually require some sort of validation (like your address, or utility bills), many homeless people do not have access to these types or records, or have lost these records. This makes it difficult for them to find a job, get housing, access financial services etc.

Information for social workers and charities: People working to help homeless people may have incomplete or disjointed information, making it difficult for them to provide help or care to the people they work with.

How is tech being used to help?

Blockchain: A blockchain is essentially a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain. So basically a network of computers which all have the same history of actions or transactions.

Instead of one company or computer holding all the information, now information is saved across everyone in the blockchain. Whenever there is a new piece of information it is recorded on everyone's ledger. All the transactions are encoded using a technique called cryptography.



Are there any risks?

Data privacy and security:

Who is using the data, and what they are using the data for is important to consider. If the data is insecure, then this could mean private information is shared or misused.

Trust:

New technologies like this one can be unknown, misunderstood, or unregulated. A lot of work needs to be put into ensuring that the technology is not misused, and people retain their privacy and dignity.

Some other examples you can check out:

- **DroneAid**
 - Pedro Cruz won the Call for Code competition with his idea to use drones to help respond to natural disasters. His idea began when he was unable to reach his grandmother after Hurricane Maria hit Puerto Rico in 2017. He used his drone to find her and he noticed messages from other survivors writing on the ground asking for help.
 - Watch this [video](#) (2.58 min)
 - Read this [blog](#).
- **Alcove - A virtual reality platform focused on connection**
 - Alcove is a virtual living room that brings people together to play games, watch videos, and forge memories.
 - Watch this [video](#) (2.55min)
 - Read this [article](#)

References:

1. <https://www.gov.scot/publications/impact-covid-19-communities-priorities-recovery-perspectives-organisations-working-communities/#:~:text=These%20included%20economic%20and%20financial,health%2C%20increased%20loneliness%20and%20addiction>
2. <https://reliefweb.int/sites/reliefweb.int/files/resources/global-increase-climate-related-disasters.pdf>
3. <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>