Welcome to SIE’s Museum of the Future!

What is it?
SIE’s Museum of the Future showcases a series of artefacts of the future that captures the future forecasts of students studying at Scotland’s Universities and their insights about a future they want to make happen. Representing a diverse range of disciplines and level of study, these students took part in the Scottish Innovative Student Awards (SISA) for 2019/2020 and received the Level 2 award: Innovation Catalyst.

How was the collection generated?
Each student receiving this award arrived at their future forecasts and insights by choosing a sector of society they were interested in within the theme of UN SDG 11, Sustainable Cities & Communities. Their next step was to identify the big drivers or forces of change shaping this sector into something new. The students also looked at the connections between the different drivers.

They then went on to identify signals or small present-day innovations that prompted them to think about the potential impacts resulting from these drivers were they to scale up and gather momentum. Could this have the potential to disrupt the status quo in their chosen sector? To answer these questions, the students treated their signals as small building blocks of evidence of futures in the making.

How the collection has been curated
Just as an artefact of the past can tell us how people lived, an artefact of the future can tell us how people will live in the future. By making the future tangible by creating artefacts of the future we can take steps to action it in the present.

“No one can predict the future but you can think about it systematically and turn uncertainty into inspiration, creativity and resilience.”

Bob Johansen, Get there Early

This collection of artefacts of the future takes the students’ emerging insights and ideas about a possible future and, with the help of a graphic artist:

- **Transforms** them into seemingly real objects and spaces that say ‘This is how the future looks and feels’
- **Shows** how familiar objects could evolve as a consequence of changes we can foresee today
- **Communicates** the students’ findings to inspire better insights about the futures they want to make happen and **inspire and inform present day action**.

How to engage with the collection
Use the tangible objects and spaces you see in the collection to generate your own insights around the future possibilities for Sustainable Cities & Communities. Does one future landscape impact on another? Can you spot opportunities and risks for yourself and others? What action do you need to take in the present to turn these forecasts into a future you want to see or make happen?

This collection is supported by:
Easy home networking reduces social isolation and allow families to be in touch on a daily basis. It allows people who are vulnerable, mobility inhibited or medically impacted as well as social minority groups to develop connections across the city, easily stay in touch with friends and family, and socialise without physical exertion or risk.

Here we see Mr Kapoor responding to a call from his daughter who lives two miles away with her husband and young children.

If he had failed to respond to this call, then an automatic alert would have be sent to a ‘good neighbour’.

This neighbour is an example of a new type of frontline health worker.

She works from home and may be the designated neighbour for up to thirty people in her local neighbourhood.
Integration of augmented reality and technology into daily life is taken for granted. Their use ranges from encouraging and rewarding people for taking part in outdoor activities, to offering help with exploring a city and the natural environment. Some of the artefacts you see here have been prescribed by doctors and mental health practitioners who manage a number of their patient’s chronic conditions with a holistic approach, known as social prescribing. An approach that gets these patients out into the natural environment for fresh air and exercise, and social interaction.

1. This scavenger hunt app encourages and motivates people to get out walking and explore their surroundings.

2. Real world objects are scanned or tagged to give people instant access to information about them.

3. This piece of wearable kit will not only count a person’s daily steps but will measure their exposure to daylight to help them manage their Seasonal Affected Disorder. It can also alert the wearer as to how much Vitamin D could be manufactured in the body as a result of this exposure. For fair skinned people it can alert them to the increased risk of sunburn and that it is time to get indoors or apply sunscreen.

4. GPS overlays allow mobile phones to talk to other mobile phones making it easy to recognise fellow users of social apps in a common local area and to arrange to meet up.

5. Augmented Reality enhancements link real world objects with related artworks, poetry and music to provide an enhanced experience as well as contributing to a person’s appreciation of the value of the real-world object and the need to protect it for future generations.
The flow of data within urban environments becomes an invisible and indispensable part of daily life creating a unique nervous system for the city. This nervous system consist of machines talking to machines as well as the human body connecting with this nervous system.

1. Vehicles, roadworks and other regular obstacles communicate actively with accessibility technology (in this case a guide cane) to alert users when a familiar route is blocked or hazardous

2. Wearable technology monitors have extended the bricks and mortar of a Hospital and Doctor’s Surgery into the heart of the community. They monitor the health of people prone to recurring conditions, and can instantly alert emergency services if there is a deterioration in a person’s condition. They send regular packages of data to the computers of primary health practitioners who can take proactive steps to get a patient to seek medical help even if that patient has no symptoms.

3. Smart roads talk to smart cars, alerting them instantly to potential road hazards – e.g. an accident or snow and ice.

4. Vehicles evaluate routes in real time, scanning for information on roadblocks, heavy traffic, or other conditions which affect fuel consumption.

5. People can engage with their external environment to get information on things they previously couldn’t see, e.g. the ions and particles in the atmosphere. Weather and air quality monitors around a city update citizens on pollution levels in real time, allowing them to choose alternative routes or travel options for good health.
New City Partnerships
Developed in collaboration with Scottish Innovative Student Award Level 2 Innovation Catalysts

Smart community centres become part of an urban nervous system, connecting people to their local area and the wider environment. The community centres forge new partnerships between residents to increase local social participation and cooperative activities. They are also the new workplace, allowing people working for large companies to operate locally and reduce the need to travel.

1. Active displays show live local maps, weather and road conditions, in addition to digital community notice boards.

2. Bookable social and workspaces are networked with a central database, and operate in low energy mode when not in use. One of their major customers are the large organisations wanting to offer their staff a local alternative to working from home. The Community Centre App uses GPS overlays to send messages to the users of the app to let them know when someone in their network is in the community centre. This alert can be sent to the relative of an elderly person who wants reassurance that this person is getting out and about.

3. Health and fitness classes offer the use of wearable technology to give immediate personalised performance feedback. These classes are also part of the local Doctor’s Surgery’s Social Prescribing initiative and, with the wearer’s consent, this feedback can go to their doctor.

4. Local libraries are linked to these Smart Community Spaces. Using virtual reality and virtual librarians, children are encouraged to browse the virtual library shelves and select a book to borrow. There is even a virtual reality seating area where they can interact with other users. An actual book is then borrowed out.
New partnerships make social responsibility a part of the fabric of the community and offer new social capital to organisations with limited resources.

1. Jobs that entail home visits are of new social value.

Existing employees such as postal workers receive enhanced training as front line health workers, and are equipped to carry out regular welfare checks on behalf of vulnerable people in their area.

2. People look to find more meaning in their lives outwith work.

Cloud-based platforms connect people with the same values and interests to work on community projects or enhance the value they attach to a routine task through social engagement.
Local businesses are integrated into a closed loop, zero-waste production cycle that keeps them competitive and a destination of choice.

1. Customers can easily find local shops aligned with their needs and interests, cutting out global shipping.

2. Shopkeepers use simple standardised technology to maintain an online inventory of their stock, easily searchable by local shoppers.

3. Shops act as drop-off points for recyclable materials within their local communities developing ‘sticky streets’ that act as places where people linger to chat and interact with shopkeepers and other customers.

4. Old items are collected for recycling and processed into fresh components which re-enter the economy.

5. Small local producers have access to cheap recycled materials, allowing them to produce new items with low overhead and environmental impact. This access has changed the definition of raw materials with these repurposed products attracting a higher price tag for customers who place more value on an item made with repurposed material rather than virgin materials.

6. New supply chains between shops and local producers are established allowing the high streets to offer unique and sustainable products.
Thank You!

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