

CONNECTED CARE

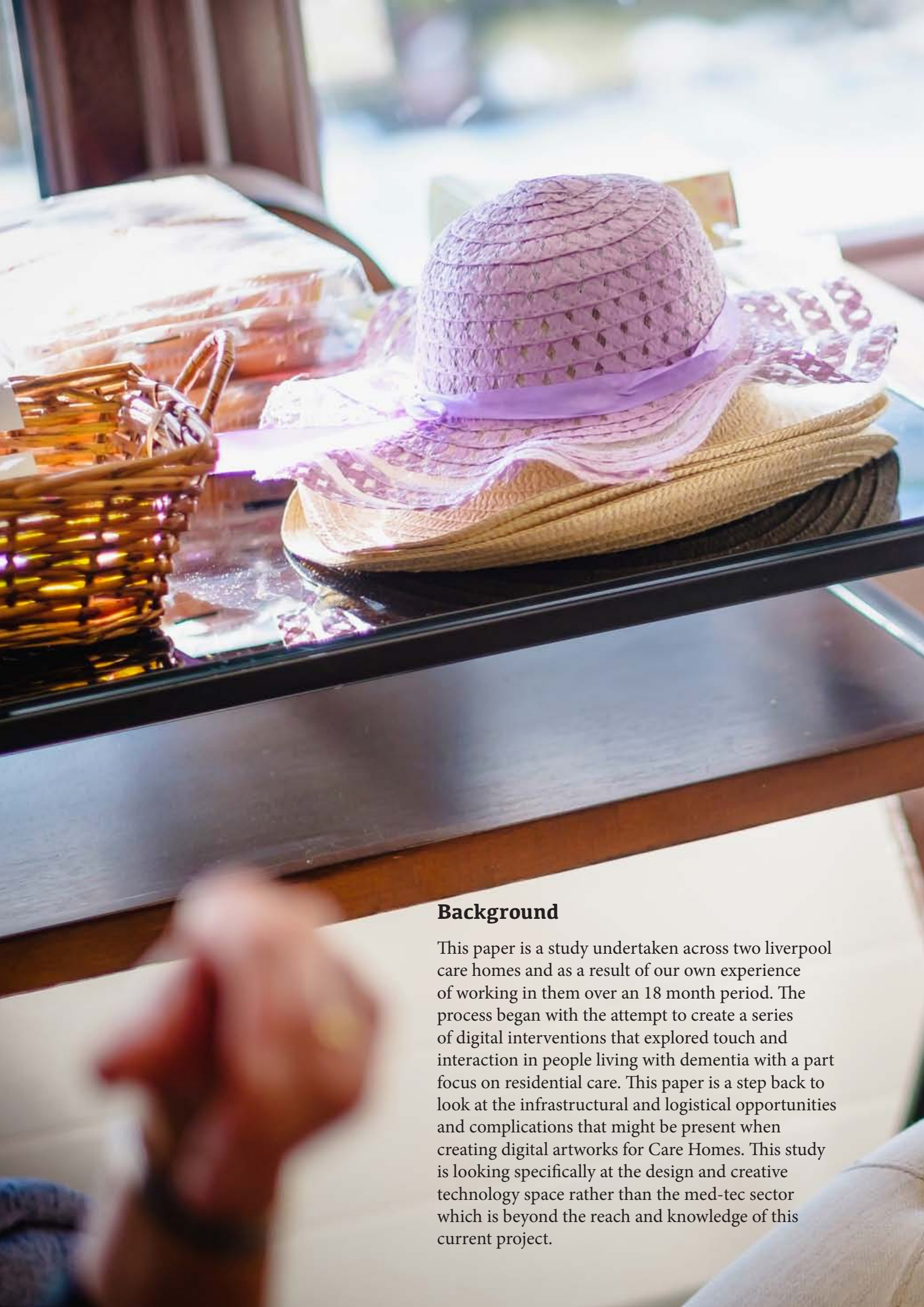
PAYMENT



SERVICE

A microstudy of digital design in the context of Dementia Care

Invisible Flock, FACT and Community Integrated Care



Background

This paper is a study undertaken across two liverpool care homes and as a result of our own experience of working in them over an 18 month period. The process began with the attempt to create a series of digital interventions that explored touch and interaction in people living with dementia with a part focus on residential care. This paper is a step back to look at the infrastructural and logistical opportunities and complications that might be present when creating digital artworks for Care Homes. This study is looking specifically at the design and creative technology space rather than the med-tec sector which is beyond the reach and knowledge of this current project.

Process

As a largely anecdotal and ethnographic study this paper is based on 6 interviews undertaken in two care homes both operated by Community Integrated Care in Liverpool and our observations and experiences across the 18 month period- the homes are Greenheys and Eccleston Court.

Creative Technology in the Dementia care space

Part of the rationale behind this study is the rise of opportunities for creative technology interventions in the space as an opportunity both for the care sector but also for creative technologists and designers. There is however a very real risk of a process led by design rather than need which results in products and money being used incorrectly or not at all, increasing the risk of staff and managerial reticence in further investment and ultimately reduced quality of care for residents. Part of the way to solve this therefore is to understand and accept the baseline level of digital literacy in the sector and care homes in general and ensure that all solutions are designed with this in mind.

Excluding medtech from this study means that we are mainly focussing on day to day operational activities and resident care and wellbeing, how digital technology feature and how they could feature more.

**“Let’s spark
the senses”**

Will

Above all else in our visits and experiences with care homes we have found a huge amount of will and desire in the homes for help and guidance around digital policies and use. Both homes were managed by people enthusiastic about technology and its potential. Even if one did admit to knowing nothing at all. As such it seems like there is a vast and untapped resource present in every care home waiting to be unlocked through a combination of more permissive and catalytic thinking around personal technology use and some creative thinking around the solutions and potential that creative technology can offer the sector

Culture

A lot of the barriers that currently exist can be broken down into three main categories:

*Budgetary

This will vary trust to trust and home to home but as a whole budgets and cost of equipment is not being prioritised and homes seem primarily reliant on donations


*Cultural

This is a general fear or lack of knowledge of how to best employ and use technology, leading to patchy inconsistent take up and implementation across a home let alone a whole sector or region.

*Training

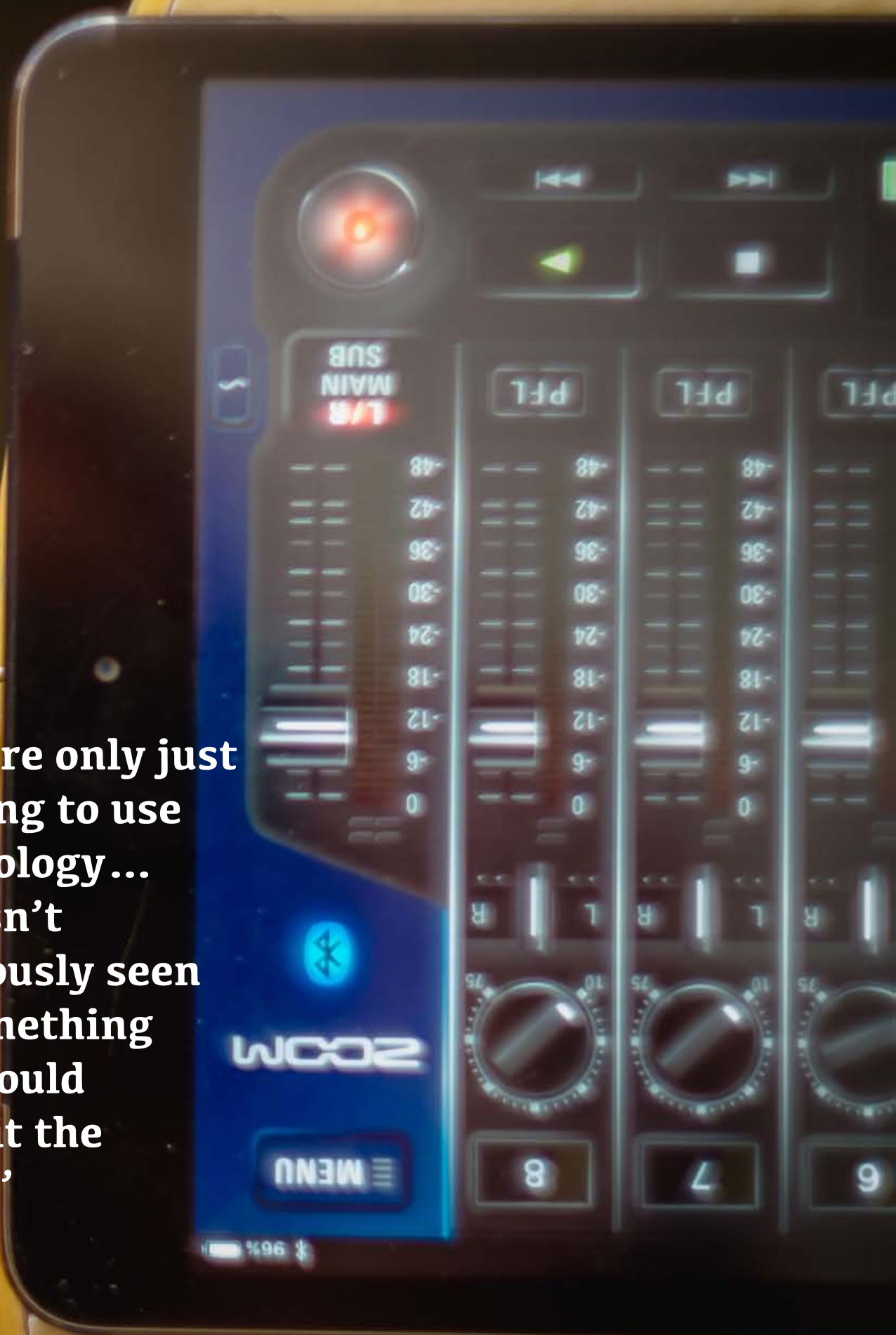
The above two categories lead to a direct lack of deliberate digital use and knowledge around how to best implement even the most simple of digital solutions that are within the reach of most homes.

“Lack of learning, lack of training provided.. there’s a massive barrier because of the age of some of the staff and their perceptions of technology.”



“We had a sensory room, but it was changed to make an extra bedroom... We need something calmer for them to take them away from what they are feeling.”

“We are only just starting to use technology... it wasn't previously seen as something that could benefit the home”





Internet

Internet access is a fundamental basic building block of any digital solution or integration in a care home setting. The ability for staff, management, family members and residents to access the internet is a fundamental necessity if digital inclusion and innovation is to be taken seriously in this context - this will become more and more true as people move into residential care so too will their digital lives they were living outside of the home, and this may include devices, personal information etc.

“If I was in a nursing home I would want my iPad or a phone, this is our generation now, its got to move with the times”



This is me as a boy with my mum and dad

When we first began working in one of the homes in early 2017 there was no internet access and only two hardwired computers in the office with no provision for online access elsewhere. Returning a year later both of the homes we visited were now equipped with fast speed robust internet, both private and public networks.

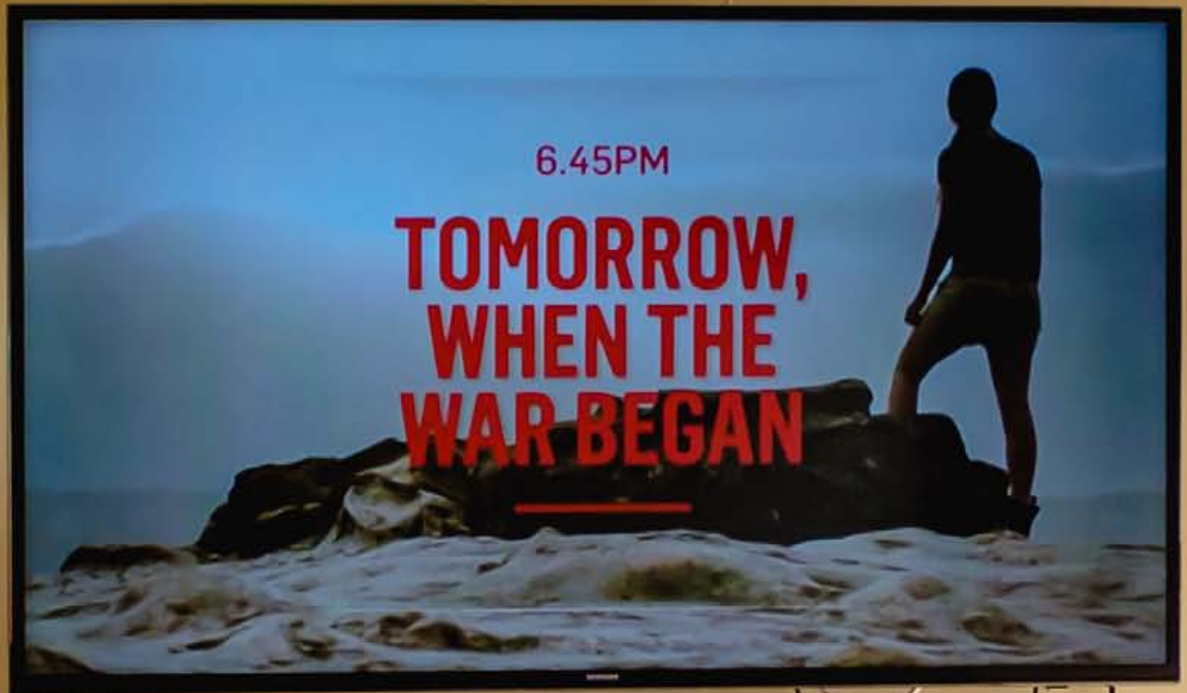
Whereas the installation of the wifi in the homes is obviously to be commended it still felt like the purpose for the installation for the staff remained unclear. Many used it on their breaks for checking emails, anecdotally some said that families used it when they visited, and in one home a relatively senior staff member did not know the password.

A network scan revealed that a lot of devices were connected to the network (148) and it was unclear if this was a shared network across the whole trust building and not just the home itself. Work and money had clearly been spent installing the internet but there appeared to be little thought or design thinking gone into its use in practice and the opportunities afforded, staff talked about it as if one day there was no internet and the next day there was.



“The wifi really opens doors but its about encouraging people to actually use it, it’s the fear of the unknown”

“There is no real definition on how we should use the internet in the homes currently, its a self discovery process.”



There felt like there was a conflict of policy and mindset where staff were now able to access the internet while working in the home but this addition had not in turn resulted in change policies around digital use, their mobile phones were still expected to not be out on the ward with them and remain in their lockers or draws in the staff room.

The internet is such an all pervasive presence in our everyday lives outside of contexts like the care home that its presence can suddenly be taken for granted and our use of it simply be 'business as usual' rather a deliberate tool that with some thought and experimentation could be used to great effect.

**“We started using
email about 3 weeks
ago, rather than
putting a letter up
and it not being
seen.”**



Training

Both homes had some clear advocates for technology working in the home, generally at managerial levels and all expressed the desire to integrate technology better through the home but there was currently no clear plan for the strategy or manner in which this could happen;

At the support worker level there is a basic level of generational awareness and use of technology, and at the managerial level more of an industry or managerial awareness of tools that are more industry specific, one referencing specific toolkits used in other areas of the care industry - and in the case an assistant manager very specific team and project management tools to increase efficiency.

Like all systems implemented across an organisation clear time and process needs to be allocated to onboarding a whole staff, with training necessary for those less comfortable with technology. Dedicated training sessions for all staff to be explained and walked through the process of using the relevant tools is essential. On a day to day allocating specific staff members in charge of digital advocacy within the staff to ensure continuity of use would be a way to ensure that systems are integrated across all staff.





**“Don’t limit
the amount
of people
you might
think would
be applicable
for it, we
shouldn’t rule
out the people
we support
and have faith
in trying new
things”**

In the sometimes highly demanding world of personal care it is especially important that the technology and digital tools that are introduced are frictionless in their adoption, a digital solution that slows down or introduces unnecessary complexity to everyday tasks will never be successfully adopted and only risks distancing people from technology further.

Beyond logistical and efficiency platforms the creative uses of technology pose a similar issue in that their use and purpose needs to be clearly established and demonstrated and the use of the relevant tools needs to be easy and clear to use along a set of guidelines and policies that a home holds, this is to ensure best practice but also continued use in a sector where agency and temporary staff are a reality.

We would suggest an ongoing process of training and upskilling based around a clear set of digital aims established at the top managerial level and disseminated through a home through a set of volunteer advocates who regularly check in and explore further uses of digital tools with management and relevant staff members. This does not mean that these staff members need to be specialised computer scientists or nerds, simply people who are comfortable using and playing with technology because they use it at home or with their own children, and are therefore more likely to think about how and when to implement the medium. A question not just of digital literacy but digital creativity.



Content & Equipment

Across both homes the use and negotiation of content are all staff led, it is the staff who are finding and bringing in CDs or using their own data and devices to provide content for residents, but also the lack of clear rules or procedures around content and a large generational gap meant that the type of content and the ways in which it was being delivered was not maximising or making the best of either the resident's quality of experience or the support worker's time.

A constant issue in both homes and also perceptible from other articles available online is that there is little to no financing of new equipment in homes as simple as the means to play music. Money or equipment that is being donated is being used to equip the homes with outdated and inefficient equipment like CD players that keeps the delivery of content stuck within some very specific memory and activity paradigms, one of the most persistent of which is the Vera Lynn fallacy which is ascribing a very specific aspect of nostalgia across all residents.



“We’ve got the TV and couple of CD players that are moving round”

One of the most charismatic uses of music we encountered was a woman who had brought her own CD collection with her and it was playing loudly out of her room and into the corridor - all the songs were rock n' roll and music from the 50s. The effect on the home as a whole was noticeable and this gap between the lowest common denominator of nostalgia is going to slip further and further. Homes in this specific case were over reliant on content that was restricting them and the experiences they could provide residents. CDs get lost, scratched, moved and crucially can only play the tracks that are on them and tethered to a place.

A further recurring issue was the nature of the content that was shown on the TVs and other media playback systems.

“I’m constantly turning the televisions off as most of the time it’s not appropriate”

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COOL OFFICE

Service Tag: **DJ6YN4J**
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“I would like them all to have access to music in their rooms and in the lounge”

A clearly formulated content policy targeted at individuals as well as the community of the home in general would allow the digital assets that do exist to be used better and combining a content policy with some well chosen equipment could allow homes to radically improve their content provision for residents.

If budgetary issues are currently preventing homes from acquiring new equipment then a policy driven approach to thinking across the entirety of a care home could result in wish lists for online shopping platforms like amazon or even the itunes app store where people could help by donating to part or some of the equipment based on very specific needs, a lot of the tools that could radically improve provision are relatively cheap consumer grade electronics, the type of which people upgrade and get duplicates of every Christmas.

Using bluetooth speakers, and Spotify accounts with individual playlists for residents which would in turn generate further suggestions of content through spotify algorithms that could turn a playlist of 12 tracks into over 100.

This is a simple relatively cheap way to create music specific for each resident or time of day or event in the home's schedule, a set of small portable speakers would make it available in residents rooms as well as in any other room of the home. Chromecast sticks in the TVs would allow carers to play music or specific films, TV shows or photos on the televisions in the main spaces. Staff will generally be aware and know how to use a lot of this equipment as they encounter it in their day to day lives and very quickly a huge wealth of content and flexibility and ease of use will be made available to them as they work with and take care of residents all of this for a few hundred well distributed pounds.

**“There’s probably
only one person
resident at the
moment who could
request a song, we
are doing all the
decision making for
them”**



Custom Creative Technology

As artists and creative technologists this is the space that we occupy and the perspective from which we approach the care homes.

The sector of dementia care and residential care is a sector that is full of potential. The demographics of dementia mean that there is a lot of interest in the design world for products and solutions many of which fulfill a wellbeing and social need. The needs that these solutions or products fill are generally more self generated and led by process.

The path to integration of these kind of products is a lot more opaque than for the type of digital products described above and the financial and support models available is equally less clear. All of this makes integrating these more experimental products a harder ask from a logistical and financial standpoint.

Our project was funded separately by a Wellcome Trust Arts Award and subsequently Arts Council England, and access to the homes in question were provided to us as support in kind from CIC and indirectly FACT Liverpool.

Conversations with senior members of CIC indicate that there is difficulty justifying the spend on products that are more experimental and often by their very nature have shorter shelf lives. The idea of a piece of kit rotting away in a cupboard somewhere is a recurring theme and obviously something that anyone considering investing in gear will consider.

“We used to have this big touchscreen game and it was good but then it broke and now its in a cupboard somewhere”

The following issues are elements that should be considered by all partners before embarking on joint projects:

Upkeep is a really tough consideration to build into bespoke designer or artist led products. Projects are often funding specific and subsidised meaning that there are little resources available for fixing or repairing a product once it has been submitted to the physical demands of a care home for a year or more.

It is a harder ask to integrate a less traditional digital offer into the workflow of support staff and carers in a home and therefore more training and time spent onboarding is necessary.

Are there ongoing costs associated with a product - server fees, membership etc... whose responsibility do these become?



What is the length of the hype cycle of a new innovative product, will staff eventually resort to music and stimulus that has long term proven clinical effects meaning a piece of new gear can be seen as a fad. There may be merit in this, keeping staff engaged as well as providing new opportunities for families who visit.

How customisable is a product, can staff add content and games, or does it need more programming or developer overhead to extend its life cycle.

These are just some of the considerations for designing ethically in the dementia care space, that artists and agencies should consider and that homes or potential product buyers should be aware of.

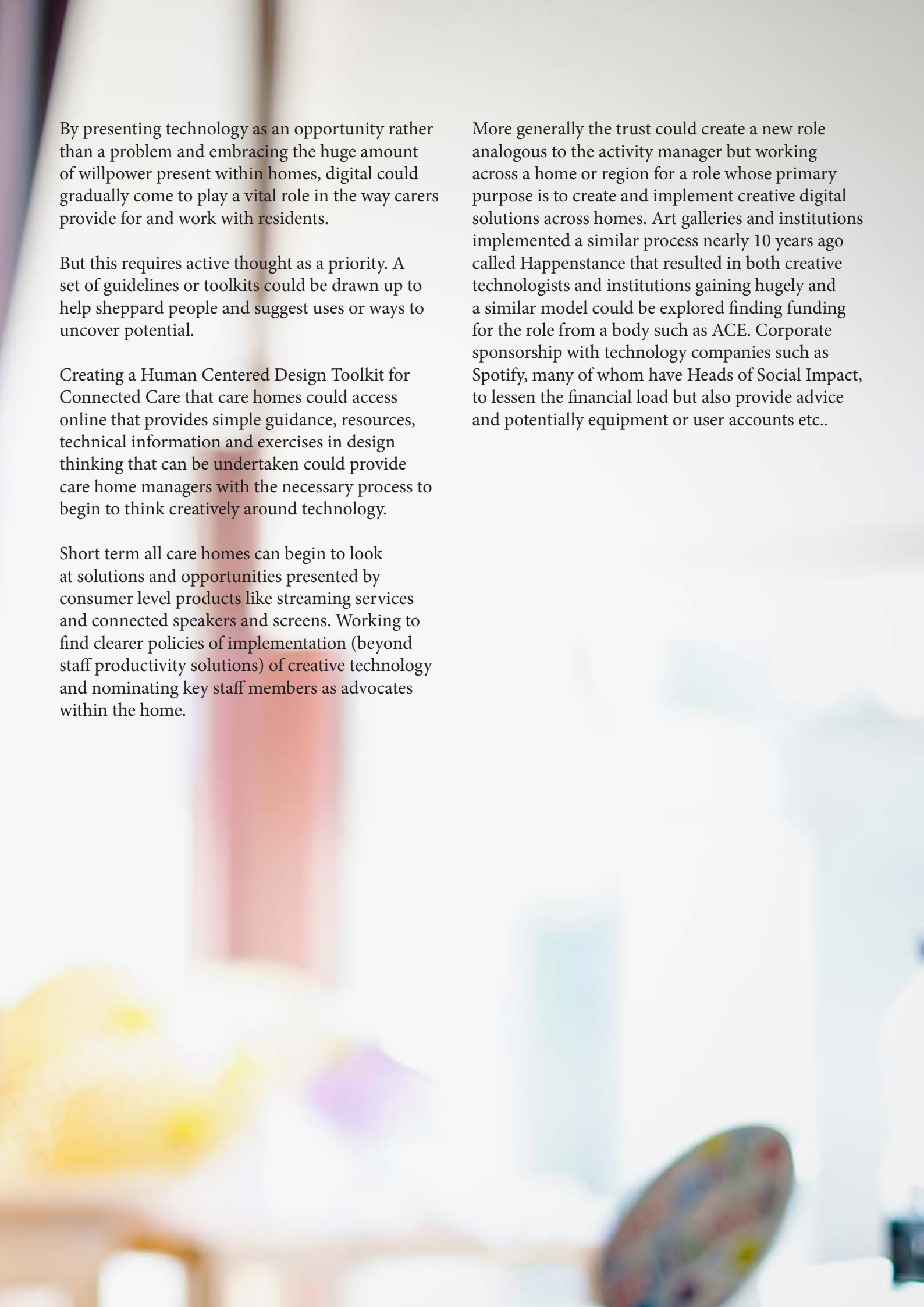
There is however a strong role for artists and designers creating interventions and products but perhaps moving beyond the model of single solution but rather through ongoing interventions and relationships. This could be through care homes positioning themselves as hotbeds for innovation, working with artists and designers to secure funding and grants and looking at how they can be creative partners in a project rather than simply receivers of an experiment or research,

Recommendations: A human design issue

With all of the above it is important to remember that the technology is only as good as the way in which it is used. Lazy or incomplete implementation of even the best of solutions will eventually fail. As such it is about taking a human centered approach to designing and considering how technology is best employed in a care home. Using technology in a deliberate considered manner, looking to solve specific problems.

Part of this is spending the time to create a digital policy that is unique to the home. A series of conscious decisions around content delivery, equipment and staff knowledge. Small internal working groups made up of staff advocates or even reaching out to the wider community and seeking out hacklabs, Universities or people looking for volunteer opportunities to help think creatively about the use of technology in the spaces of care homes.





By presenting technology as an opportunity rather than a problem and embracing the huge amount of willpower present within homes, digital could gradually come to play a vital role in the way carers provide for and work with residents.

But this requires active thought as a priority. A set of guidelines or toolkits could be drawn up to help shepherd people and suggest uses or ways to uncover potential.

Creating a Human Centered Design Toolkit for Connected Care that care homes could access online that provides simple guidance, resources, technical information and exercises in design thinking that can be undertaken could provide care home managers with the necessary process to begin to think creatively around technology.

Short term all care homes can begin to look at solutions and opportunities presented by consumer level products like streaming services and connected speakers and screens. Working to find clearer policies of implementation (beyond staff productivity solutions) of creative technology and nominating key staff members as advocates within the home.

More generally the trust could create a new role analogous to the activity manager but working across a home or region for a role whose primary purpose is to create and implement creative digital solutions across homes. Art galleries and institutions implemented a similar process nearly 10 years ago called Happenstance that resulted in both creative technologists and institutions gaining hugely and a similar model could be explored finding funding for the role from a body such as ACE. Corporate sponsorship with technology companies such as Spotify, many of whom have Heads of Social Impact, to lessen the financial load but also provide advice and potentially equipment or user accounts etc..



Wi-Fi



Green Heys Guest
Connected



CIC DMZ



CIC Corporate

