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An Roinn Forbartha
Tuaithe agus Pobail
Department of Rural and
Community Development

Age Friendly Ireland Pilot

Initiative Smart Technology for Older Persons/Effective ICT Utilisation
by Older People in the Community

Project Summary



**Maynooth
University**
National University
of Ireland Maynooth

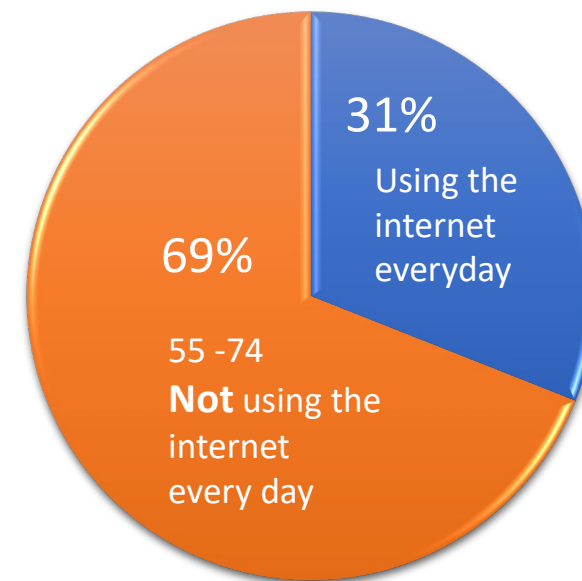


The Digital Divide

Introduction

In the last ten years, there has been a revolution in social networks and human interaction; smart devices have fundamentally changed how people interact. They have become the primary mechanism for many in maintaining and establishing real-world connections and they have become a source of news, entertainment and commercial engagement. For those not digitally connected the risk of social exclusion is heightened. As yet, digital adoption is a significant challenge for many older adults and, consequently, this has limited the effectiveness of the public and commercial sectors that endeavour to serve them. Age-related accessibility and design limitations, digital literacy and attitudes to technology are key contributors to this reluctance to embrace technology. Studies have also shown that the complexity of user interfaces coupled with a lack of prior knowledge of digital solutions create feelings of humiliation and embarrassment resulting in rejection of new digital technology.

The ACORN smart tablet design is the outcome of studies and pilots summarized herein, where the views and experiences of older people were taken on board in the final layout, features and intuitive aspects of the device.



2017 Central Statistics Office: Internet Usage

In addition, Over half (52%) of internet users aged 60-74 did not use the internet within the 3 months prior to CSO interview.



Impact of The Digital Divide ...

Social
Exclusion

Social Isolation

Loneliness

Decline in Physical
& Mental Health

Loneliness and social isolation are harmful to our health: Research shows that lacking social connections is as damaging to our health as smoking 15 cigarettes a day (Holt-Lunstad, 2015) and, conversely, social networks and friendships not only have an impact on reducing the risk of mortality or developing certain diseases, but they also help individuals to recover when they do fall ill (Marmot, 2010). This is now a very real and prevalent issue within the ageing population. Diminishing health, reduced social networks, the possible loss of a spouse and reduced access to family members all contribute to reduced independence and isolation.



The Age Friendly ICT Pilot “ACORN”



The ACORN pilot project sought to demonstrate the impact of effective smart technology solutions for improving the health and wellbeing of older adults in urban and rural communities, specifically in:

- Demonstrating how an **age friendly tablet designed solution**, with the appropriate supports, can significantly impact on the health and wellbeing of older adults living in urban and rural communities.
- Gaining valuable insights and evidence on ‘what works’ in supporting older adults ‘go online’ in order to access the full range of supports and local services under 3 categories - social, commercial and E-Government. The pilot focussed on supports in the following areas:
 - Accessing local enterprise and community services
 - Improving rural connectivity, communications
- Securing the evidence needed in order to inform the roll-out of a plan to optimise the number of older adults going online
- Identifying what supports (if any) are required to encourage independent enterprises.



Acorn Pilot Overview



95 Participants from Co. Limerick, Meath, and Fingal County (North Dublin):

Participants

- Received an age friendly designed “Acorn” smart tablet
- Over the period of the trial, participants were invited to attend a number of group training sessions in their local areas.
- Participants were asked to try out the features of the device on a bi-weekly/monthly basis and to give opinions on these features. Their comments and feedback informed the look of the final product
- This feedback was submitted in order to inform National and Local Government on how best to support older people to be fully engaged on-line.



The 'ACORN' Smart Tablet

Designing an Age-Friendly Platform

Focus on Relevant Content and Services

Safety and Security

Communications

Health and Wellbeing

Finance

Independence

Encourage Engagement
and Participation

Inform

Interact

Involve

Create

AGE-INCLUSIVE
DIGITAL
CITIZENSHIP



What is the ACORN Smart Tablet?

The ACORN is a smart tablet solution, purpose-built to solve the challenge of online adoption and to improve the quality of life for the user. It solves the digital adoption challenge through intuitive age friendly design, providing content that is immediately relevant to the user in a closed secure network. It has been developed for older adults by older adults.

ACORN differentiates itself further from generic tablets by servicing the users core needs through 3 interaction elements - **Inform**, **Interact** and **Involve**.

By Informing, the solution endeavours to provide comprehensive help, guidance and support on digital services and keep users informed on news and upcoming events.

By Interacting, ACORN's aim is to give users a secure, user friendly interface to communicate and schedule events with family, friends and the wider community and

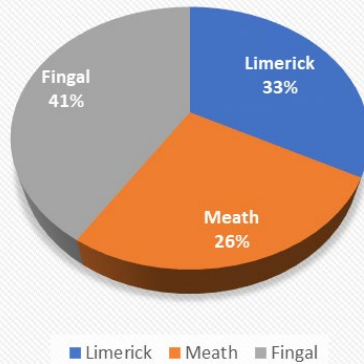
by Involving, the ACORN encourages older people to get more involved and continue to contribute in their local community and areas of interest. Aligning with the World Health Organisation's research, the ACORN focuses on the following needs for older people: **security, communication, sustained independence (transport, support and interests), finance and health.**



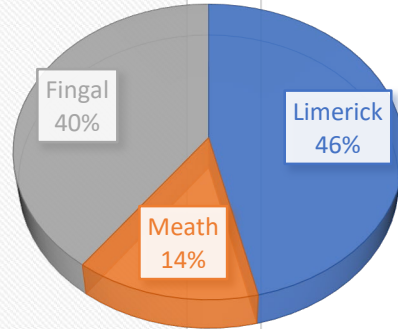


Some Participant Characteristics

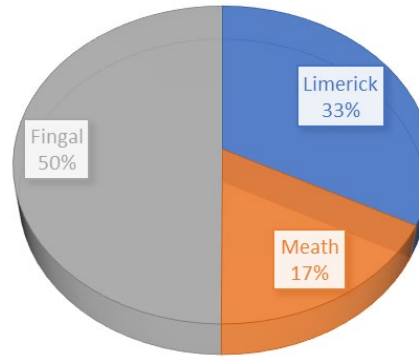
Retired



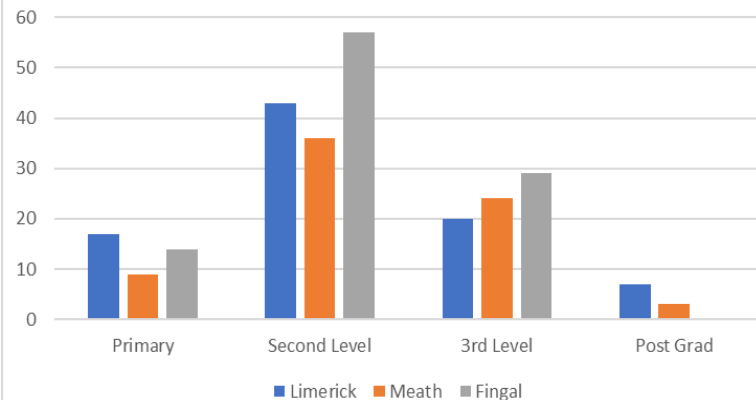
LIVING ALONE



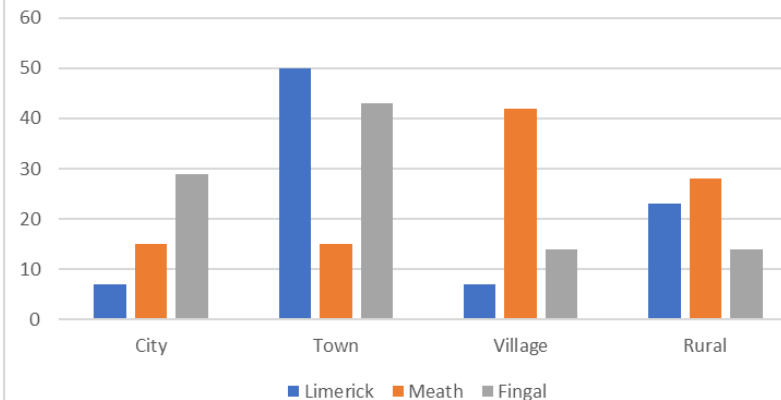
FEMALE



Education Highest Level Achieved



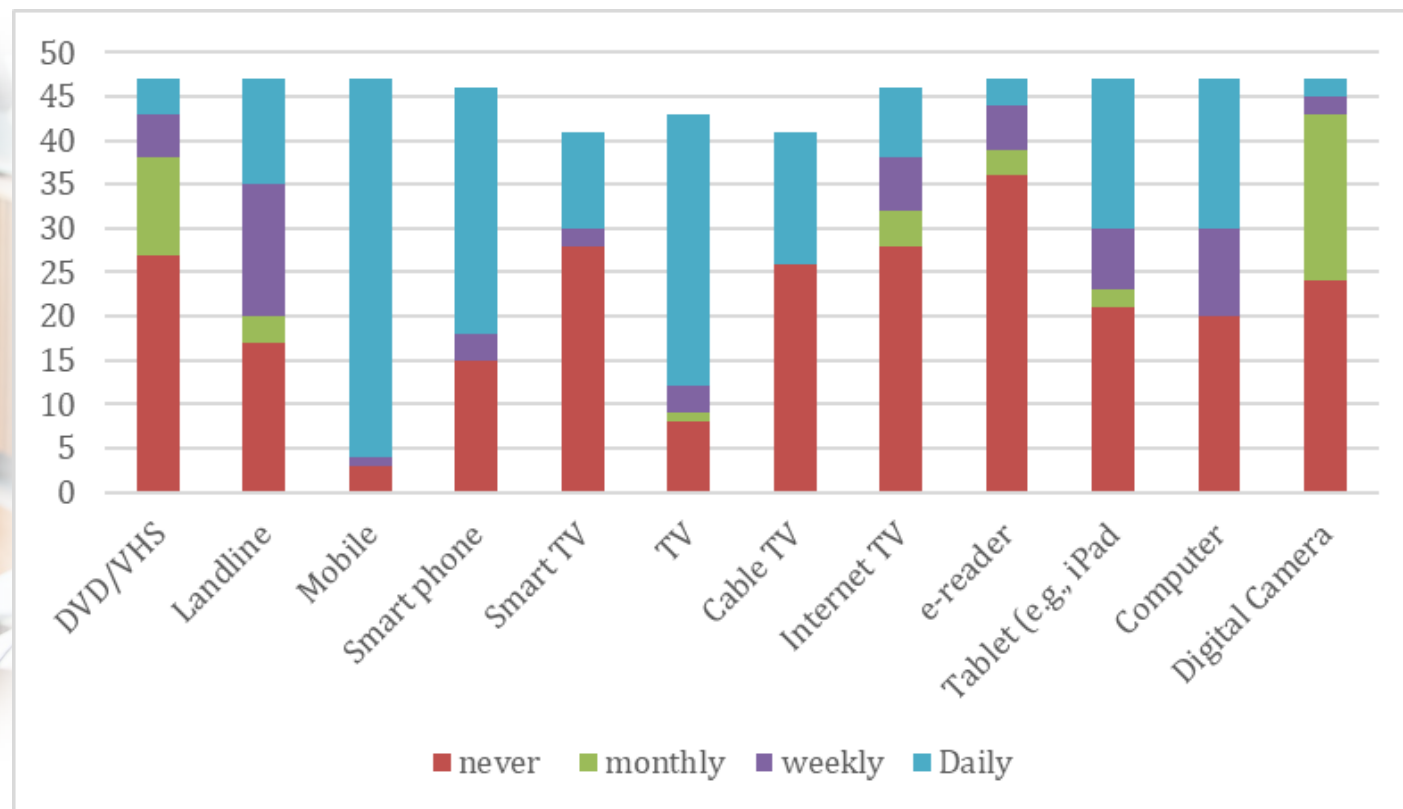
Location



- Trial participants were recruited by the local authorities, through the Community Development Departments, from groups who are actively engaged in local communities. Each Local Authority's Older Person's Council was also actively encouraged to extend an invitation to participate to members of their parent organisations.
- Trial participation was entirely voluntary and each participant received an ACORN Smart tablet device.



Participant use of Technology pre-Pilot

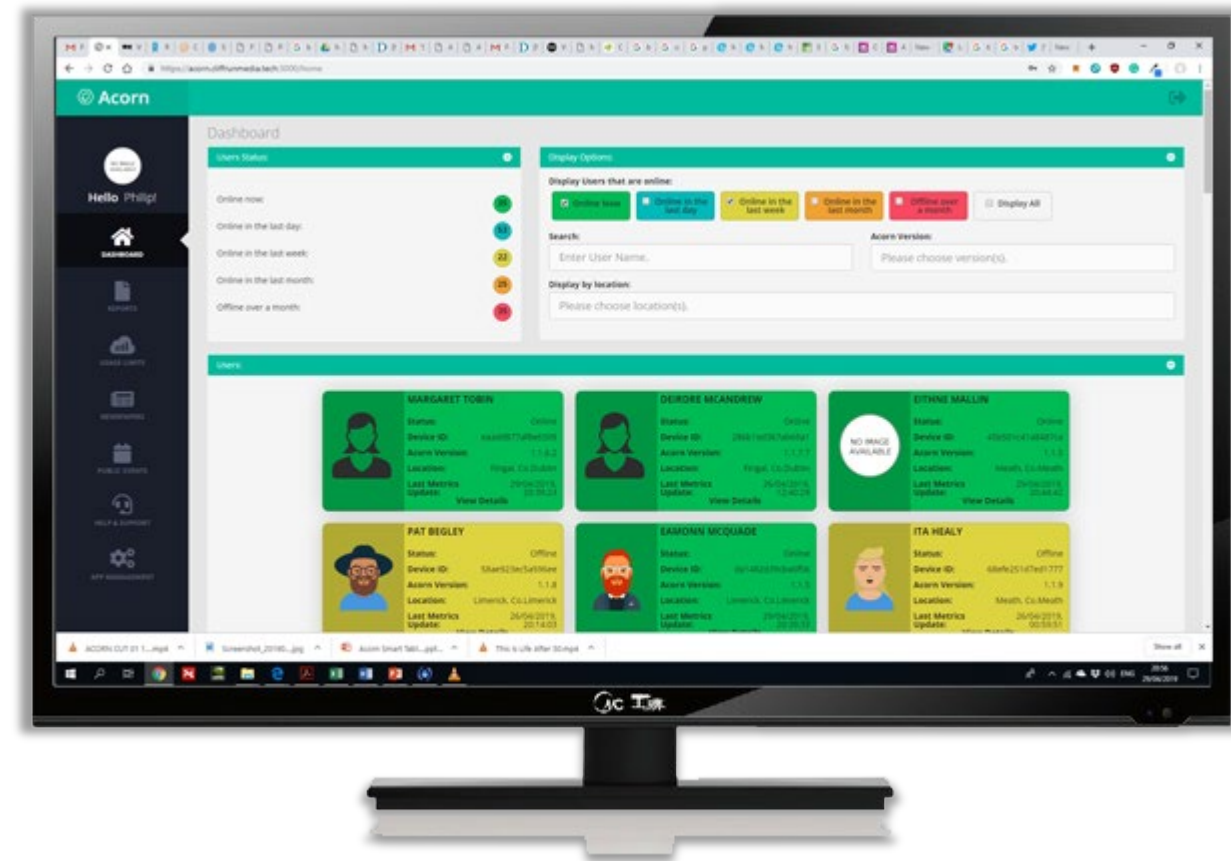




Monitoring Participant Usage in Realtime

The ACORN team developed a portal for Supervisors and Mentors to:

- Track and Manage Participants usage live on Acorn
- Monitor bugs and issues
- Update Technology and Features as appropriate based on user testing by participants
- Run Reports and Analysis of User Adoption and Interests
- Add Local Events, Newspapers, Tasks, Surveys and other Local Content.





Feelings BEFORE the Pilot





Most Popular Apps used in the Pilot

Fingal



Video and Music : YouTube



News : RTE News Now



Social : Facebook Lite



Shopping: ALDI



Games: WordScapes



Health: Acorn Health Tips



Other: Fingal Libraries

Meath



Video and Music : YouTube



News : BBC



Social : Facebook Lite



Shopping: LIDL



Games: WordScapes



Health: Operation Transformation



Other: User Experience

Limerick



Video and Music : YouTube



News : RTE News Now



Social : Facebook Lite



Shopping: DoneDeal



Games: WordScapes



Health: Acorn Health Tips



Other: BorrowBox



Feelings AFTER pilot





What some participants are saying..

"I feel very proud that I've come this far"

"I have become so addicted to it, I'd miss it after half an hour. I never expected to become so reliant on it!"

"I don't feel like I'm on my own anymore. I can look up things for myself and be in contact with my family in seconds, its very rewarding to do it for myself"

"I don't feel foolish now because I know its ok to ask questions. They're not stupid, they're just questions"

"I left school at 15 and wouldn't be good at spelling but on Acorn that doesn't matter. This has been such a good experience, I now want to try other things"



Observations and Conclusions



- The ACORN Smart Technology pilot project strongly suggests that designing technology specifically for those less familiar with modern digital solutions will generate beneficial results. It demonstrated that technology designed for older people (ACORN) can have a direct positive impact on digital adoption. Daily usage became the norm for 70% of participants. The trial showed significant increases in the utilisation of smart tablet features. Participants accessed more applications more frequently with minimal training and intervention. Age friendly websites were more frequently utilised by participants. Where text size could not be enlarged or applications were confusing, users tended to avoid.
- The collaborative nature of the project is what made it a distinctive experience. Bringing service providers, older people and product designers together to develop a device that encourages and supports older people to go online is unusual, as it can be time consuming and fraught with problems.
- The involvement of older people in product development at design stage was insightful on the part of the device provider. It presented the older participants with an opportunity to influence the look and feel of the product and, more importantly, to have a say in the content. This made the process a more meaningful and relevant experience for them.
- The social aspect of group learning for older people should not be under estimated. Most of the trial participants indicated that they did not want the classes to end.
- All the evidence from Age Friendly consultation shows that older people particularly those living alone, feel financially stressed. Over the period of the trials, it became clear that some, if not all, trial participants were concerned about the costs associated with the purchasing and maintenance of smart technology devices, monthly payments for SIM cards and follow-up product support.



Recommendations



1. Promote greater awareness of age friendly design in order to increase the number of older users.
2. Provision of a national bank of smart tablets for training purposes
3. Appropriate training is vital to encourage and assist the older person to embrace digital technology
4. Recognise the value of a 'Peer Mentor' programme in order to optimise the sustainability of training programmes.
5. Consideration be given to the introduction of a digital allowance to marginalised groups, including older people.





Maynooth University

Independent Review Summary Findings:



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- Usability of the device was rated as above average.
- Confidence in the use of varied ICT related activities increased and computer anxiety was significantly decreased from baseline levels to the follow-up.
- There was a high level of satisfaction with the training overall, although the findings from the focus groups suggest that it may be beneficial to carefully consider the differing skill levels of participants in the design of any future workshops/training.
- More than two-thirds of the participants would consider buying the Acorn if it was available in the shops, and over three-quarters would recommend the device to a friend.
- Success will depend on an on going partnership between the technical developers, local and other public authorities and public service providers, and a range of voluntary and commercial service providers.
- **There are gains for all sides if this potential partnership is developed.**
- **This ambitious project in designing an easily accessible tablet computer, using the latest digital technology, can play a key role in supporting the engagement of older people with services, community and society.**



ACORN

Dedicated to developing solutions
that promote social inclusion,
health and wellbeing for all.

INFORM INTERACT INVOLVE



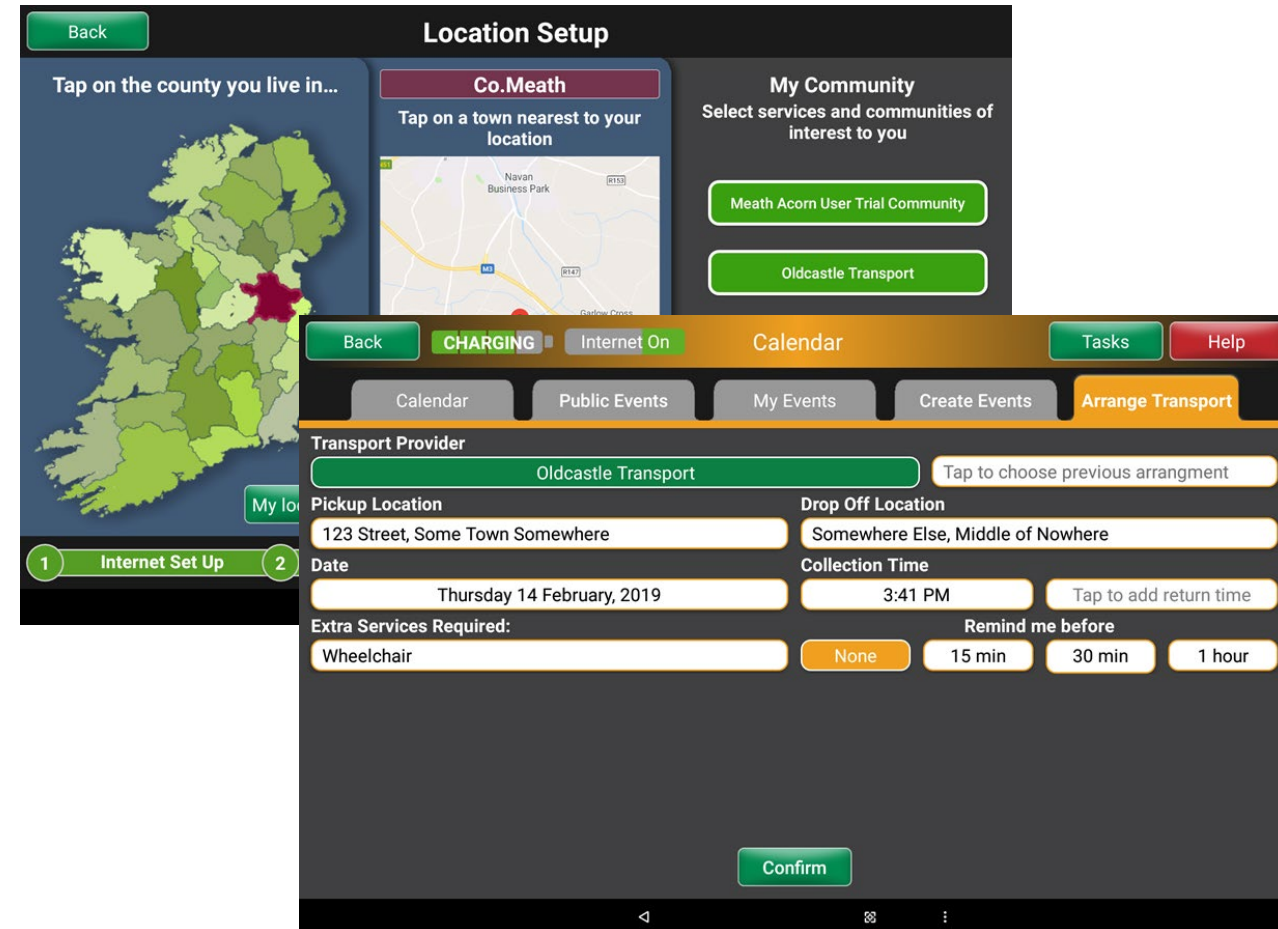
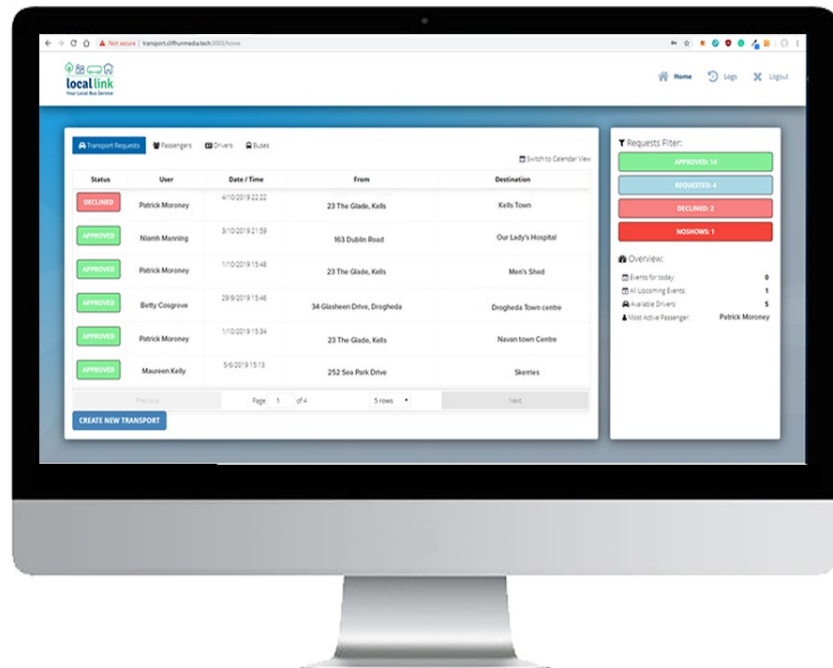


Other Derivative Pilots using Acorn technology

Sustained Independence (Transport)

Sustained Independence through access to a local Rural Transport service for older citizens.

The Acorn platform successfully integrated an Age Friendly booking page using the communications and calendar components of Acorn to enable convenient digital access to important transport services.





Other Derivative Pilots using Acorn technology

Health

- Elderly vulnerable patients require time and skill to maximise their recovery. Patients should be given every chance to return to living in their own home. Transitional care outside of an acute hospital is better for patients and the health service (freeing up level 4 acute beds).
- The Acorn was configured as a transition of Care solution with Age-Friendly remote monitoring capability which enabled clinicians and patients to stay closely connected during the post acute episode transition to ambulatory care for convalescing patients.

- 20+ Patients over a 4 month period received a high level of care to maximize their chance of maintaining independent living in their own home.
- Our transitional care management system directly impacted reduced rates of readmission to hospital. The solution also facilitated better healthcare communication and fosters effective caregiver-patient relationships.
- Clinicians monitored patients' health (vitals) remotely, identify symptoms and intervene early.





Thank You