



## Natural Allies

### Digital inclusion and the circular economy

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#### Executive summary

Device refurbishment organisations offer huge potential towards a vision of ethical, sustainable digital inclusion in Scotland. The intersection of digital inclusion and climate consciousness presents an opportunity to think about a strategic approach to two pervasive and complex issues.

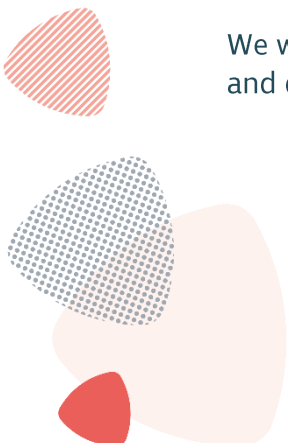
Engaging with 17 voluntary sector organisations across Scotland to fully understand the experiences of developing and running these services has given us an insight into how our role as the voice of the voluntary sector in Scotland can be leveraged to support and strengthen their work. The issues and barriers that organisations face are not easily solved, but through small actions, effectively joining the dots and platforming good work, we can begin to make a sustainable difference.

The device refurbishment community outlined the key issues they face. Chiefly, a lack of awareness, knowledge and inter-connectedness was viewed as key. Supply issues, resourcing and misconceptions or fears around personal data security were also highlighted. More nuanced concerns related to ideas of ‘dignity in practice’ and the trust and relationships that are required throughout the process of refurbishment.

We want to support and enable organisations working in this field. As a result, we have taken our learning and focussed on three, small actions that can start to work towards this.

- Support existing organisations to come together, share learning and best practice, and create opportunities for partnership,
- Work alongside organisations to promote and emphasise the work they are doing, and
- Consider how we can embed circular principles into our own work.

We will continue to build on this learning, work co-productively with organisations and develop our offer of support as we move forward.



## Background

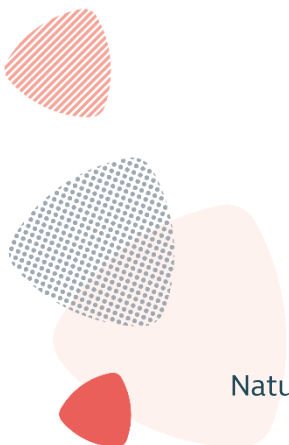
Digital exclusion is becoming an increasingly complex issue to support. As our lives become more inextricably linked with the internet, we are aware of the need to develop routes towards ethical, sustainable digital inclusion. It's important that we are aware of the overlapping issues that influence and are a result of digital engagement, such as its impact on the planet.

SCVO is committed to being a climate conscious organisation. In our role as the membership organisation for Scotland's voluntary sector, SCVO has a unique opportunity to explore and embed climate-conscious action in the support we offer.

SCVO Digital works to ensure that everyone has the opportunity to be online. In supporting this vision, we recognise that an affordable device is a crucial component in making this happen. A key tension exists, then, in enabling this vision and supporting our own climate goals. As a result, we worked with a range of device refurbishment organisations across Scotland to understand what, if any, role we could play in strengthening or emboldening their work to drive action from our sector to think about circular economy.

Although not a new concept, there has been a recent popular move towards considering the value of the circular economy and its interplay with digital inclusion. SCVO provided funding through our [Device Refurbishment Support Fund](#) (2021) to build the capacity of voluntary sector organisations as well as supporting Nominet's [Reboot Project](#) assisting schools and voluntary sector organisations develop device redistribution projects. More recently [Good Things Foundation](#) have conducted research with business leaders across different industries to investigate reusing IT equipment from the private sector.

Our learning focuses primarily on the issues faced by voluntary sector refurbishment organisations in Scotland.



## What did we learn?

Engaging with a range of organisations across Scotland has given us an opportunity to further understand the key issues within delivering device refurbishment and reuse work. Many of the organisations we spoke to were well established, with robust procedures and achieving outcomes beyond the immediate scope of device refurbishment (including employability and upskilling). Some organisations have begun to monetise and raise revenue from parts of the process – including secure data erasure. These organisations all had individual circumstances, operated different models and worked in different ways, but we were able to identify common themes which underpin their experience and offer starting points for developing an offer of support.

### There is a lack of awareness and knowledge about the device refurbishment community.

Organisations across Scotland focussing on device refurbishment all highlighted a need for greater awareness of their activities. This served multiple purposes: a greater awareness among potential donors of this opportunity to take a circular route in disposal of devices, and also among potential beneficiaries that struggled with gaining access to devices.

Beyond this, organisations spoke about the need to connect with each other to share learning and resources in a way which could strengthen their work through reducing silo working and creating new opportunities.



**A network would be useful. It doesn't have to be involved or frequent, but designed by the people who are working in this space with a focus on peer support.**

One organisation described themselves as a “blade of grass in a field” in respect to how they evaluated their presence. This lack of awareness has previously been raised by organisations that participated in SCVO's Device Refurbishment Support Fund (2021) – a concerted effort to build relationships and market services was required for projects to make an effective start.

### Data security, erasure and confidence is a key element at both ends of the process.

When devices are donated to organisations, confidence needs to be held that any data existing in the system is completely wiped before the device is re-distributed. Organisations have developed different ways of achieving this – but trust in the refurbishment organisation is crucial for donors.

Data erasure can incur significant cost, either through software licencing or time-cost involved in ensuring a complete wipe. For some organisations, their chosen process was to remove and physically destroy the original hard drive and replace it with a new one – which incurs a hardware cost.

The key consideration for all parties involved in the process is around trust and accountability – where public institutions are involved (such as local government or NHS) the risk is significantly higher given the sensitivity of the data held. As a result, there can be a reticence from large-scale consumers of technology (such as those public institutions) to follow a donation route as part of their IT disposal policy. This is not just the case with public bodies, but with any donor of technology from business to individual.

Organisations in this space have been able to overcome this barrier through use of sophisticated data sanitation software. Donors can request certificates which prove the data cleansing process has taken place. The refurb organisations engaged in this research expressed that there is a lack of understanding about the standards of data erasure at institution level. For example, one organisation was told that their local authority pay for ‘secure data wiping’ via a private sector supplier, despite the open-source software the organisation use wiping data to the same standard. The knowledge around data sanitation across the sector generally was strong.

### Supply issues relate to the needs of end users.

Most of the organisations we engaged with spoke about the quality and kinds of devices that they receive for refurbishment. There was a consistently high level of re-usable devices among donated stock, and it appeared that quality was not an overwhelming issue. In fact, some organisations outlined that older devices can be more reliable and robust.

A participant, for example, described that in refurbishing an old Lenovo laptop, they were able to make its running speed compete (positively) with a MacBook Pro.

An issue that was raised by multiple organisations was the types of devices that were donated, rather than the quality. End-users often expressed a requirement for laptops, which appear to be in high demand but low supply for organisations. Laptops offer a more convenient and easily transportable alternative to desktop computers, which appear to be a commonly received device for many organisations. One organisation spoke about the challenges of providing a device which couldn’t be transported to be charged (for example at one of the many ‘warm spaces’ that have appeared during the cost of living crisis) and thereby creating an inadvertent barrier to access.

Desktop computers equally require sets of peripherals such as keyboards, mice, and monitors. These come at an extra cost for the organisation. However, some organisations valued the donation of desktops.

Laptops, when they are donated, are often powerful and easily refurbished devices. One organisation discussed the use of open-source operating systems such as ChromeOS being viable and useful alternatives to expensive licences such as Microsoft. Effectively creating Chromebooks from old, disused laptops has enabled a cost-effective solution for organisations.



## Resourcing for this work can be a significant issue preventing projects from maximising reach.

Services across our sector are stretched and have reducing access to diminishing resources such as funding and volunteers. This is no different for device refurbishment organisations, most of whom raised that a lack of sustainable or multi-year funding was a barrier for them. A lack of appropriate funding and investment for organisations is arguably more evident in organisations working on a direct distribution model (those organisations that receive devices, refurbish them and then distribute them to end-users), rather than those working on a social enterprise model (where revenue is raised in some way through the sale of refurbished devices).

Resourcing for organisations is about more than money, it also relates to the physical space required to store and work on donated devices. Two different organisations both commented that parts of their premises had been taken over by donated devices. Similarly, some spoke about the difficulties of distributing devices, the time-cost impact this had and the accumulated mileage and cost.



**“It takes an hour to get across Clackmannanshire – imagine how much longer it would take in large rural areas or even across cities.”**

Distribution of devices works differently for different organisations. For many, it works on a first-come-first-served basis that reflects the current supply. Other organisations work on an application system. An organisation based in Ayrshire invites applications from people that require devices which are decided on by its team of volunteers (made up of beneficiaries with additional support needs accessing the service as part of work-readiness).

Some organisations have found ways to raise additional revenue, including through offering secure data wiping services.

## Devices are only part of the solution – and connectivity is increasingly unaffordable.

Supporting digital inclusion requires a holistic approach that includes connectivity as well as skills. Many of the projects we engaged with spoke about the difficulty of supporting people’s digital inclusion ambitions without being able to offer them access to connectivity.

As a result of the cost of living, by May 2022 6% of people across the UK had considered sacrificing their internet connection – and data poverty across Scotland is a significant issue (an estimated 620,000 people lived in data poverty in 2021). Although device refurbishment organisations are offering a viable option for access to affordable devices, there is a frustration that “it’s just an expensive coaster” without access to the internet.



Some organisations are offering short-term connectivity packages with devices through national schemes or paying for connectivity from their own reserves. To promote sustainable digital inclusion, the connectivity question is something that requires greater attention and thought.

**Trust and relationships between organisations and donors is absolutely key.**

In establishing consistent supply lines, organisations need to develop relationships with donors. This is particularly pertinent with institutions such as local authorities and NHS where risks are higher from a personal data perspective. Organisations that had developed relationships with large-scale donors (particularly within the public sector) outlined that this takes time, and that finding the right person in a business, council or local NHS was difficult.

However, some organisations were able to use intermediaries to foster new relationships and establish supply lines. An organisation in Greenock utilised the Inverclyde Chamber of Commerce to network and publicise its refurbishment service.

**Cultural concerns and ‘dignity in practice’ need to be addressed to enable the normalisation of circular approaches to digital inclusion.**

Sensitivity needs to be applied to the process of device refurbishment and distribution, especially where devices are distributed directly to end-users. There is an important discourse around ‘dignity’ in direct distribution to end-users, with some digital inclusion organisations outwith the refurbishment community challenging that second-hand devices create a concern that recipients might feel ‘undeserving’ of new devices. The potential risk here is that organisations engaged in the digital inclusion process may resist second hand devices through fear of reinforcing inequalities.

The organisations we spoke to raised no significant concerns around this. In fact, many of them spoke of the overwhelming positivity from recipients of refurbished devices. The key cultural change that needs to happen is around consumer behaviours, supporting people that can afford to buy new devices to consider buying refurbished ones.

The only cultural barrier that was raised in preventing users from accessing support from refurbishment organisations was pride:



**“Pride is what stops some families from asking for things. Many of them think ‘other folk need it more than we do’”.**



## What can we do?

Engaging with a range of organisations has enabled us to take a broad view of the device refurbishment community within the voluntary sector in Scotland. Many of their concerns are shared and present SCVO with an opportunity to provide support as part of our vision of a thriving voluntary sector at the heart of a successful, fair and inclusive Scotland and our commitment to sustainable, ethical digital inclusion.

A key part of our discovery work was to test whether there is scope and purpose for SCVO Digital to be involved in this conversation. Organisations told us overwhelmingly that our support would be welcomed – however it is crucial that this support is strategic and works in tandem with the goals of the community.

It is important to recognise that not every issue outlined by this learning has a demonstrable solution provided by SCVO and equally important to understand that SCVO doesn't promote device refurbishment as the singular solution to digital exclusion. Rather, this is part of a wider package of support to promote, develop and sustain improved practice across the sector.

As a prominent voice of Scotland's voluntary sector, SCVO's influence and ability to platform, promote and connect organisations is a key element of our response. We recognise that some of the biggest issues faced by organisations in this space relate to awareness and understanding about the work that they do. The work that we intend to develop will therefore focus on internal and external themes.

### External

#### **Bring together and better connect organisations working in device refurbishment.**

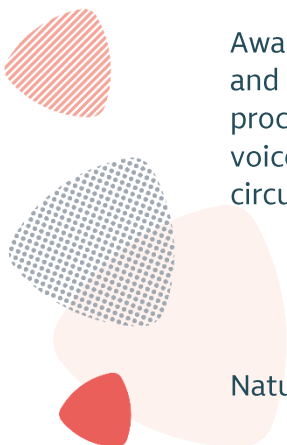
The strength of the community currently engaged in this work can be enhanced through the development of a partnership approach. Creating connections, reducing silo working and identifying common barriers and opportunities will enable organisations to think more strategically about their service. It is important that whatever this looks like is led by the organisations at the heart of the issue.

#### **Actions for SCVO:**

- Invite research participants in the first instance to an initial meeting to consider the potential of a co-produced network, supported by SCVO Digital where appropriate.

#### **Develop broader awareness of device refurbishment organisations and their role in digital inclusion.**

Awareness is clearly a key issue across the community – both in terms of end users and donors. Until awareness is expanded across the sector and beyond, linear processes will continue to be followed. SCVO has a broad reach and authoritative voice across the sector in Scotland and can leverage this for the benefit of the circular economy.



### **Actions for SCVO:**

- Work with partners to create a series of learning webinars and workshops that address the themes outlined in this report, specifically around demystifying issues of data erasure and safety.

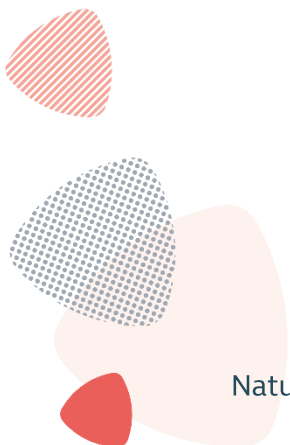
### **Internal**

#### **Clearly embed circular principles into digital inclusion work.**

The promotion and increasing understanding of the opportunities within device refurbishment rely on consistent support and platforming. SCVO should strive to lead by example and emphasise the role that device reuse can have in combatting digital exclusion more widely.

### **Actions for SCVO:**

- Examine the key workstreams of the Digital Inclusion team and understand where device reuse can be promoted and spotlighted.
- Influence where possible the partners and organisations we work with to think about taking a circular approach to devices.





## Appendix 1: Who did we speak to?

We are grateful for the time of the following organisations that helped us to understand this issue and develop our learning.

- Access Technology (Software Training Scotland), Inverclyde
- Barry O’Kane, Australia
- Belville Community Garden Trust, Inverclyde
- Budding Engineers, The Highlands
- Castle Douglas IT Centre, Dumfries and Galloway
- Circular Communities Scotland
- Clackmannanshire TSI
- Community Links, South Lanarkshire
- Edinburgh Remakery, Edinburgh
- Glasgow North West Voluntary Sector Network
- ILM Highland, The Highlands
- Input Community Works, North Ayrshire
- Reboot Forres, Moray
- Red Chair Highland, The Highlands
- Renew Crew, Scottish Borders
- Re-use Network, Bristol
- Reusing IT, West Lothian
- The Turing Trust, Midlothian

## For more information, contact

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