



**DIGITAL TOOL RE-USE  
IN CHARITIES' SERVICES**

This research was conducted by The Engine Room between March and September 2019, as part of the Digital Spark programme, funded by Comic Relief and the Paul Hamlyn Foundation, and led by CAST. The content of this report does not reflect the official opinion of Comic Relief, Paul Hamlyn Foundation or CAST, and responsibility for the information and views expressed in the report lies entirely with The Engine Room.

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## THE ENGINE ROOM

The Engine Room accelerates the fight for social justice by advancing civil society's strategic, effective and responsible use of data and technology

## CONTRIBUTED TO THE CATALYST

The Catalyst sets out to revolutionise how we tackle social and environmental issues in the UK: reshaping organisations to be more responsive to the communities they serve; more resilient; and more collaborative in the creation and scaling of solutions. We are a coalition of major foundations, digital design agencies, civil society bodies and the UK government, seeking to massively accelerate the use of digital in the UK's voluntary and charity sector.

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# SUMMARY



## WHAT'S THIS REPORT ABOUT?

The Engine Room interviewed 23 people working in UK charities to learn about why, when and how charities re-use digital tools in service delivery.



## WHAT IS RE-USE?

Re-use is about integrating or customising an existing digital tool, instead of building something from scratch. Our research found examples ranging from using or repurposing existing tools through to customising existing code. We also learned about organisations who were building re-usable tools.



## WHY RE-USE?

We found that re-use enables quick testing and learning and makes it easier for charities to kickstart their entry into designing digital services. We also learned about the positive impact that re-use can have on teams and organisational culture. We heard about re-use increasing the confidence of team members involved; shifting attitudes towards digital tools more broadly; and acting as a key to a community of other practitioners and organisations working to address similar challenges.



## HOW TO BUILD CONFIDENCE WHEN CHOOSING TOOLS

You're more likely to re-use a tool if you feel confident in your choice. Important confidence drivers include knowing what tools are out there, having a clear tool selection process (including understanding your priorities and requirements), and support from peers, and buy-in from senior leadership.



## CONSIDERATIONS AROUND RE-USE

Re-use isn't always the best option, and charities we interviewed highlighted a few key considerations. Existing tools or code may not be a sustainable long term solution, as they aren't always actively maintained and updated. You may also have less control over the user experience. Your team might not have the technical skills to maintain an open source tool, though good documentation and an active community can go some way to address this challenge. Some charities working with sensitive data or vulnerable communities may also need products that meet higher privacy and security thresholds than those available.



## WHAT NOW?

Get in touch If you have an example of re-use to add to our showcase of what's possible, or if you'd like to take part in user testing for resources we develop off the back of this work.

# INTRODUCTION

## BACKGROUND

This research was conducted by The Engine Room as part of the Digital Spark programme. Funded by Comic Relief and the Paul Hamlyn Foundation, and led by CAST, Spark seeks to increase the UK charity sector's digital capability. This includes helping the sector adopt digital service principles and take better-informed approaches to digital tool creation and re-use.

Multiple organisations are working in a consortium to address different parts of this broad objective. The Engine Room was tasked with addressing the following question:



How can we support UK charities **to re-use existing digital tools<sup>1</sup> to decrease the cost of early innovation** and **increase the pace of digital adoption** within their work?

Before addressing this question directly, we sought to unpack some of the assumptions built into the question, and to build our understanding of how, when and why charities re-use digital tools. Our research centred around three key objectives, to learn about the:

1. value of re-use for charities and their services
2. enabling conditions for re-use
3. barriers to and limitations of re-use

We will be using this report's findings to develop resources that help charities re-use digital tools in practical, responsible and strategic ways over the next few months.

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1. In our research we focused on digital tools used in service delivery (tools used to deliver part of, or an entire, beneficiary-facing service), rather than for internal or operational purposes, including social media and fundraising. This was largely due to another stream of ongoing work in the UK charity sector - Charity as a Platform - which is focussed on charity operations, and the potential for digital tools, resource sharing and tool re-use to increase efficiency for the charity sector

## DEFINING RE-USE

For the purpose of this research, we defined re-use as:

**“INTEGRATING OR CUSTOMISING AN EXISTING DIGITAL TOOL, AS OPPOSED TO BUILDING SOMETHING FROM SCRATCH.”**

The examples of re-use that came up in our research cover different tool types (e.g., open source or off-the-shelf tools), different tool uses (e.g., a chatbot, a learning management system) and different stages of the design process, from testing assumptions with a few users through to scaling a service. The table below includes a number of examples that came up in our interviews, helping paint a picture of the varied spectrum of re-use in charities' services.

TYPE OF RE-USE	EXAMPLES	
Using or repurposing existing tools	<ul style="list-style-type: none"><li>* Refugee Action used a combination of off the shelf tools in the early iteration of its learning management system (google docs, zoom, go-to webinar, survey monkey).</li><li>* The Ava project used Slack to create a community of practice (rather than building an online forum) for external practitioners working on gender based violence and abuse.</li><li>* Lancashire Women used sharepoint on their website to improve the volunteer registration process</li><li>* The Mix integrated Massively.ai - an off-the-shelf tool - to create and test a chatbot</li><li>* Action for Children and Addaction both integrated off-the-shelf tools to create webchats (Intercom and livechatinc respectively)</li></ul>	
Customising existing code	<ul style="list-style-type: none"><li>* AVA have used moodle (an open source tool) for their online course since 2014, including a substantial update in early 2019</li><li>* Hestia were gifted code from the Pittsburgh Women's Refuge, which they adapted for their BrightSky app</li></ul>	
Building re-usable tools	<ul style="list-style-type: none"><li>* SCVO adapted the code it had built for its charity sector recruitment website (Good Moves) so that it could be used by Volunteer Scotland for their opportunity search tool.</li><li>* Scotland Shelter created its "I need help" button as an open source tool to be re-used by other entities of Shelter (England &amp; Wales Shelter) and other charities.</li><li>* The Samaritans has written into the contract with its agency that the webchat they are developing is to be made open-source.</li></ul>	

# FINDINGS

## THE VALUE OF RE-USE

We found that re-use enables quick testing and learning and makes it easier for charities to kickstart their entry into designing digital services. We also learned that re-use can have a positive impact on teams and organisational culture. We heard about re-use increasing the confidence of team members involved; shifting attitudes towards digital tools more broadly; and acting as a key to a community of other practitioners and organisations working to address similar challenges.

### RE-USE LOWERS BARRIERS TO ENTRY INTO DIGITAL

*"It made the project possible"*

Several charities explained that tool re-use had enabled their digital project to happen in the first place. For these organisations the cost and time required to build or commission a tool from scratch would simply have been prohibitive. In addition, re-using a tool or code, and the speed with which you can get started, helped charity staff to get buy-in from key decision-makers, such as convincing digital-skeptic leaders to venture into digital services.

### RE-USE BUILDS THE SKILLS AND DIGITAL KNOW-HOW OF TEAMS

*"I've seen more confidence among the team"*

Re-use increases confidence in a number of ways. By giving staff an opportunity to "learn by doing" (especially when a tool has good documentation and how-to-guides), and by encouraging staff to learn about surrounding infrastructure (e.g. the processes and requirements around their website). For one organisation, this increase in confidence and competence meant the team was able to negotiate a reduction in web management costs before deciding to move their website hosting in-house. For another, it led to non-technical staff becoming less dependent on the in-house developer to fix small issues with their open source tool.

### RE-USE ENABLES QUICK TESTING AND LEARNING

*"We had a tool working in two weeks"*

Re-using a tool meant charities were able to test their assumptions quickly, before investing large amounts of time and money. Interviewees found that it was easier to gain approval for a larger financial commitment. "Being able to test this relatively quickly in an organisation this big, made sign off much easier."

Re-use in the early phases of a project or service design process also enabled charities to learn early where there wasn't a need for their product, or if their proposed solution was not appropriate. One charity decided not to develop a chatbot for its online support service after testing with an off-the-shelf chatbot. Their testing found that users would rather wait longer and speak to a person. Ultimately, they determined there was not sufficient need for a chatbot to warrant pursuing the project.



## RE-USE SHIFTS ATTITUDES TOWARDS DIGITAL SERVICES MORE BROADLY

*"We've learned that we can do so much with digital and existing [tools]"*

For charities at the start of their digital journey re-use often provided an easier entry point to digital services. We heard that informative, successful experiences with re-use can make organisations "more receptive" to subsequent re-use. For example, one organisation adapted open source code that it had already re-used to develop a second app for a different target audience.

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## CHOOSING TO RE-USE

The conditions that enable re-use (that make it possible, or easier) largely relate to individual and teams confidence levels. You're more likely to re-use a tool if you feel confident in your choice. Interviewees saw these factors as important confidence drivers:

- \* **Knowing what tools are out there** - This was one of the most cited enabling factors. Organisations have a limited amount of time and capacity to explore different options. One interviewee said that after looking at the vast number of tools available for webchat, they all felt "a bit much of a muchness". Interviewees referenced peer organisations and agencies as key sources of information around tools. Staff working in larger organisations emphasised the importance of sharing internal knowledge about tools' qualities/ functionalities.
- \* **Decision making processes** - Interviewees told us that guidance around choosing tools helped them to feel more confident in their decisions. This builds on our 2016 research into tool selection practices. This research highlighted the connection between the way organisations choose tools, and the outcomes of their projects. A thoughtful process, based on a deep understanding of users' needs and the landscape of support that already exists led to improved outcomes.<sup>2</sup>
- \* **Access to peer support** - Another important component of building knowledge and confidence was peer-to-peer knowledge sharing. Interviewees told us how learning about others' experiences with tools helped them to feel confident in their choice. But some charities found it difficult to get advice, information and support from peers. They found that they did not have peers working on the same topic or challenge, or they lacked access to knowledge sharing opportunities. It is also difficult for organisations developing a tool to know who would find their lessons useful. Interviewees also talked about the competitive funding environment they operate within, and how this can discourage sharing resources. This in turn reduces the potential for re-use.
- \* **Learning & training** - Training played an important role in giving teams confidence to experiment, test and re-use in their digital work. "We wouldn't have started to explore [re-use] without [the CAST] fellowship"
- \* **Good documentation** - Documentation and how-to-guides helped smaller teams to feel confident in re-using a tool. These resources allow them to answer questions and fix small problems without external support.
- \* **Technical intuition and confidence amongst leadership** - Low levels of digital literacy amongst senior leadership made it harder for digital teams to get sign-off and buy-in. Around open source tools in particular, misunderstandings can lead to resistance from leadership.

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2. <https://toolselect.theengineerroom.org/public/assets/tool-selection-research-summary.pdf>

## LIMITATIONS OF RE-USE

As we have seen, re-use can have a range of positive impacts on organisations and their digital services. However, it is not always appropriate or possible to re-use. Our interviewees highlighted considerations and limitations around re-use, particularly when entering into later stages of service design (e.g. rolling out a tool across a live service), working with particularly vulnerable communities or with highly sensitive data.



### SUSTAINABILITY

*"When push comes to shove, we need this for the long-term"*

A key concern with regards to re-using digital tools was their long-term viability or sustainability - "Will an open source or shared tool still be working in four years time? Will there still be a community around it, or someone you can contact for patches or if something breaks?"



### WORK AND COST REQUIRED TO RE-USE AN OPEN SOURCE TOOL

*"[We] still haven't re-used anyone else's code. It's much easier for us to build and share"*

Interviewees highlighted several barriers to using open-source tools. These included

1. A lack of technical or coding skills
2. Hidden costs (such as needing to host the tool on your own server), and
3. Compatibility and integration with existing systems.

Charities creating new tools don't always have the capacity to invest in making these tools easy to re-use. Developing documentation, providing training and troubleshooting to other organisations all take time. Promoting the tool so others are aware of it requires extra resources that charities often don't have.



### PRIVACY & SECURITY CONCERNS

*"Where we tend to find stumbling blocks is around security of tools"*

For charities working with sensitive data or vulnerable users, the security of the tools they use is a priority. Existing tools with the relevant functionality don't always meet an organisation's security requirements. Open source tools can be more secure than proprietary tools, assuming that there is an active community maintaining the code. But this is sometimes taken for granted. A common best practice when using open source tools is to have code audited to ensure no bugs or security holes exist. Volunteer facing services might be a more appropriate place to begin experimenting with re-use.



### LACK OF FUNCTIONALITY/CONTROL OVER USER EXPERIENCE

*"We really care about user experience"*

For some of our interviewees, re-use wasn't an option for them in the long-term, as existing tools didn't have the necessary functionality, or it wasn't possible to customise the tool to the extent that it would meet specific user needs.

# CONCLUSION

These interviews have helped paint a more nuanced picture of digital tool re-use in the UK charity sector. Examples shared were wide-ranging, with re-use in the early development of a new service being most common.

Organisations experienced wholly positive impacts of re-use, including saving time and money; lowering barriers to experimentation during digital transformation, and building digital confidence on small teams.

Teams are more likely to re-use a tool if they feel confident in their choice. Important confidence drivers include knowing what tools are out there, having a clear tool selection process (including understanding your priorities and requirements), support from peers, and buy-in from senior leadership.

We will be using this report's findings to develop resources that help charities re-use digital tools in practical, responsible and strategic ways over the next few months.

Get in touch if you have an example of re-use to add to our showcase of what's possible, or if you'd like to take part in user testing for resources we develop off the back of this work.

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 SEND EMAIL

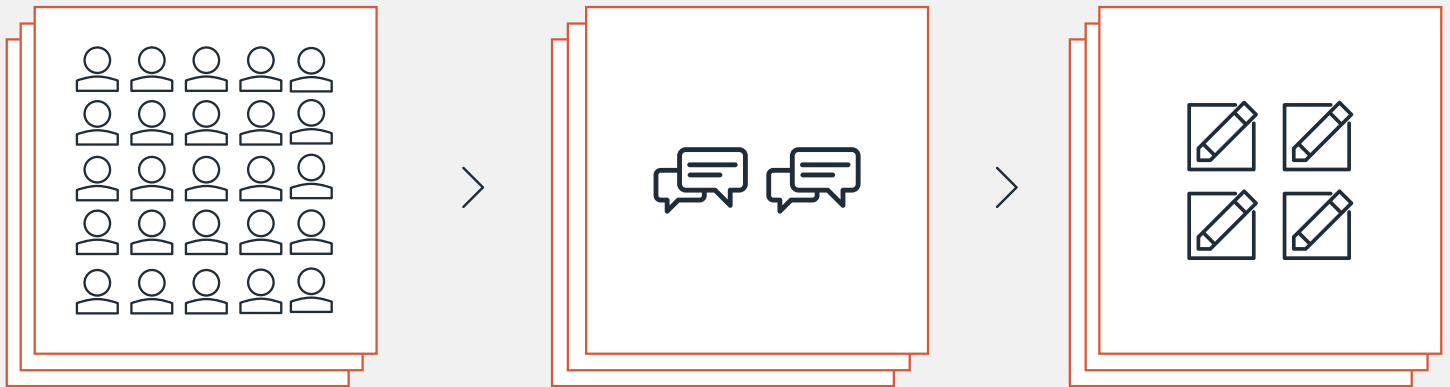


# ANNEX I: METHODOLOGY

We conducted **23 interviews** with people working for or with charities that have re-used digital tools in their service delivery. We identified cases of re-use through desk research, and via contacts from the Digital Spark consortium partners, and through an open call in a blog post. See Annex II for a list of the organisations we spoke to.

We conducted **two rounds of interviews**, focussing on organisations working on homelessness, gender justice, mental health, and youth – our funder’s priority areas. Our first round of interviews examined tool selection, whilst our second followed a digital tool re-use journey to flesh out examples of re-use, identify prerequisites for digital tool re-use and to understand the value of re-use for UK charities. See Annex III for a list of our interview questions.

When identifying potential interviewees we sought to strike a balance between the **four focus areas** listed above, organisation size (particularly with regards to the digital & developer teams), type of digital tool re-use and geography (to make sure we had a regional balance and were not too London-centric). By focusing on charities who had re-used digital tools, we aimed to surface lessons and best practices that would be relevant for others in the sector.



# ANNEX II: INTERVIEWEES

## PHASE ONE - TOOL SELECTION



CHARITY	FOCUS	GEOGRAPHICAL FOCUS	SIZE <sup>3</sup>
Alzheimer's Society	Health (dementia)	UK-wide	Super Major
Barnados	Children & young people	UK-wide	Super Major
Centrepoint	Children & young people; homelessness	London, Manchester, Yorkshire and the North East	Major
Chayn	Gender Justice	Global (but UK a focus country)	Small
Children's Society	Children & young people; mental health	UK-wide	Major
Grapevine Coventry & Warwickshire	Supporting people experiencing isolation, poverty & disadvantage (Also mental health; youth)	Coventry & Warwickshire	Medium
The Mix	Youth	UK-wide	Large
NCVO (National Council for Voluntary Organisations)	Supporting voluntary & charitable sector	England	Super Major
Refugee Action	Help & advice for refugees, including homelessness	UK-wide	Large
SCVO (Scottish Council for Voluntary Organisations)	Supporting voluntary & charitable sector	Scotland	Major
St. John's Ambulance	Health (first aid)	UK-wide	Super Major

3. We calculated charity size by mapping the charity's income (found in public records) to the NCVO framework. (NCVO framework annual income: micro <10K; small £10-100K; medium £100K-1mn; large £1-10 mn; major £10 -100 mn; super major >£100mn)

## PHASE TWO - PREREQUISITES FOR & IMPACT OF RE-USE



CHARITY	FOCUS	GEOGRAPHICAL FOCUS	SIZE
Action for Children	Youth and children	UK-wide	Super Major
Addaction	Mental Health	UK-wide	Major
Alexandra Rose	Families on low-income with young children	UK-wide (with London focus)	Medium
Ava (Against Violence & Abuse)	Gender Justice	UK-wide	Major
Cithrâr Foundation	Gender Justice	Northern Ireland	Medium
Hestia	Gender Justice	London	Major
Lancashire Women	Gender Justice	Lancashire	Large
The Mix	Youth	UK-wide	Large
Samaritans	Mental Health	UK-wide	Major
Scotland Shelter	Homelessness	Scotland	Medium



# ANNEX III. INTERVIEW QUESTIONS

We carried out semi-structured interviews as part of our phase 1 and 2 research. The interviews broadly followed the set of questions below, but we added or omitted questions depending on the flow of the interview and specifics of what the interviewee was telling us.

## PHASE ONE: HOW DO ORGANISATIONS CHOOSE DIGITAL TOOLS FOR SERVICE DELIVERY?

### [General digital tool use]

1. Does your organisation use digital technologies in delivering its services? If so, how? Can you give an example of a digital technology or tool?

### [Specific example of tool use]

2. Could you tell us a bit more about how you integrated this, or another digital tool in a recent project at X organisation? What problem (if any) were you trying to solve by integrating this digital tool?

### [Selection ]

3. Do you know about how this tool was chosen, or were you involved in choosing it?
4. When was the first time your organisation talked about the tool in this example?
5. Did you look at another organisation for inspiration? If yes, did you reach out to a peer organisation for advice?
6. What prompted the first discussions, and what happened next?
7. How did the organisation think of or come to know of a particular digital tool?

### [Decision making process]

8. What were the first steps towards making a decision about a particular tool?
9. Was information collected to inform that decision? If so, how? Are there any particular resources you consulted?
10. How helpful was the information? What were the gaps?
11. Who was involved/how did a decision get made? What influenced that decision?

### [What happened after selection]

12. What happened after the tool was chosen? What happened when you started using it? (Did it meet expectations? Did you resolve the problem you set out resolve?)

### [Learning & reflection]

13. Reflecting on everything you described so far, what do you think you learned about choosing and adopting tools? What do you think other people in the organization learned?
14. What would you have done differently if you could? What do you wish you knew at the start of this process?

## PHASE TWO: WHAT ARE THE PREREQUISITES FOR DIGITAL TOOL RE-USE TO HAPPEN? WHAT IMPACT DOES RE-USE HAVE FOR ORGANISATIONS?

*We are really interested to hear about X project and how you adapted and re-used Y tool(s).*

### [re-use journey]

1. What was your relationship to this tool/project?
2. Why did you decide on this tool for the project?
3. How did you first hear about or come to know of the tool?
4. What happened next?

### [prerequisites of re-use]

5. Was information needed, and if so what kind of information?
6. Was there anything you needed to do in order to be able to re-use the tool?
7. Within your organisation, what capacities or resources were needed to re-use this tool?
8. Was any external support or expertise needed?

### [impact]

9. What were the results of using this tool on service delivery goals? (such as program efficiency, program quality, number of people reached)
10. What was the effect of re-using this tool? (Compared with if you'd built it from scratch or used a different tool?)

### [If not answered above, ask:]

11. Did re-using this tool have any effects internally? (such as on staff expertise, cost savings, management or leadership perceptions of digital, internal processes and ways of working,
12. Were there any external effects, and if so what were they? (eg. on perception of the charity, on their funding, on working with developers and agencies, etc)
13. How long has the project been running for?
14. What has been the long term impact or sustainability of the tool?

### [assessment]

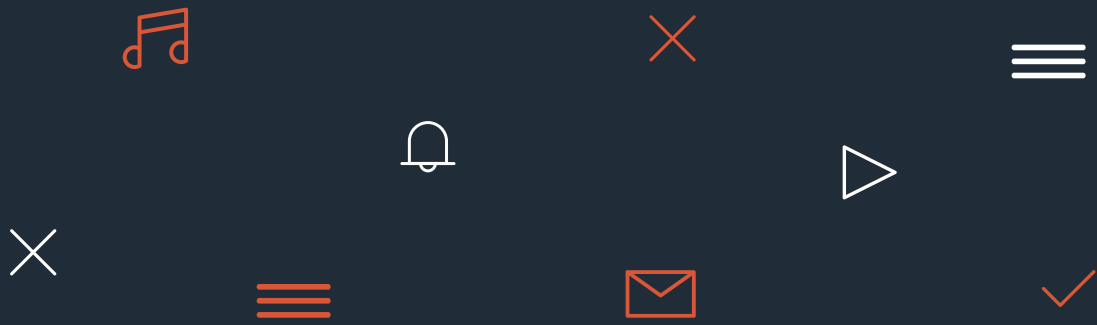
15. Were there any surprises for you in re-using this tool?
16. Would you use the tool you re-used again? Why or why not?

### [learnings]

17. What did you learn from this experience of re-using a digital tool? In hindsight, is there anything that you wish had known?
18. Has this instance of digital tool re-use led to subsequent tool re-use in your organisation or changes to how the organisation thinks about re-using digital tools?
19. What do you think are the 3 most important conditions needed for re-using a tool?







# THE ENGINE ROOM

