July 2021

# digital pivot

CREATIVE SCOTLAND

ALBA | CHRUTHACHAIL

# Contents

# Introduction

This report documents the Digital Pivot consultancy process delivered by Suzy Glass and commissioned by Creative Scotland in response to the Covid-19 pandemic.

Digital Pivot took place between April and December 2020. This report summarises key findings and outlines emerging recommendations.

It is written for the cultural sector, specifically for individuals and organisations that are enthusiastic about but have little experience of using digital technologies as creative tools.

It will be useful for you if you are embarking on a journey to embed digital technologies within the heart of your practice. We think it might also inform sector-support agencies and public bodies as they continue to evolve their programmes.

# Context / Covid-19

On 23 March 2020, the Prime Minister announced the first UK-wide lockdown in an attempt to stop the rapid spread of Covid-19.

The impacts of the pandemic have been huge and devastating. An overwhelming number of people have become ill, lost people they love, lost their livelihoods. At the time of writing (Spring 2021) the pandemic continues to generate powerful shockwaves throughout communities, here in Scotland and across the world.

These manifest within the cultural sector in Scotland in a number of ways.[1] Within the performing and visual arts:

- Venues have been shut for the best part of a year — with a few weeks of reprieve for some galleries and museums in some parts of the country;

- Festivals have not taken place in their intended sites, with some moving online while others have been postponed or cancelled;

- Production has — in the majority of cases — had to stop or significantly change shape;

- Commissioning has slowed down significantly;

- Touring has stopped;

- Significant pots of money have been redirected to support survival;

- Audiences have not had the opportunity to visit cultural venues or take part in in-person creative activity.

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## Terminology [A–D]

Throughout the Digital Pivot programme we found that a number of terms were either unknown or being used incorrectly. If you're pivoting your practice, it helps if you can use language precisely, particularly when you're building teams and talking to designers and technologists.

Here is a brief guide to some of the words and phrases that can be confusing:—

### Artificial Intelligence [AI]

There are a number of different definitions of AI. For our purposes, it's probably most useful to think about AI as intelligent systems that have been taught or have learned how to carry out specific tasks without being explicitly programmed to do so. This is often achieved through machine learning. The virtual assistants Alexa (Amazon) and Siri (Apple) are both AI technologies.

### Augmented reality [AR]

An overlay of digital content and information onto the physical world, usually — although not exclusively — viewed through the screen of a mobile device.

### Device

An object invented for a particular purpose. People have started using the word device as shorthand for electronic device which — perhaps obviously — is a device that achieves its purpose electronically. Often people are referring to mobile phones or tablets.

### Digital

Composed of data in the form of especially binary digits (*ie* 1s and 0s). However, the word has come to mean a number of different things in different contexts, and it is important you make sure that your team are all using the same definition. For the purposes of this report, we're defining digital as the use of technology to connect people with content (not necessarily via the internet). Not to be confused or used interchangeably with *online* or *the internet*.

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At the time of the first lockdown it became clear that the sector would need to turn rapidly to online working in order to continue engaging with audiences and participants.

Many joined the rush to get their work online. Between December 2020 and January 2021 Creative Scotland surveyed the Scottish creative sectors, and found that one third of organisations that responded referenced pivoting their work during the pandemic.[2]

At one end of the spectrum, people started posting existing content on online platforms. At the other end they began commissioning and creating new content designed for online consumption. The quality of this work varied hugely, as did the reasons for and the extent to which people engaged with it.

This rush to online working was significant; it will register as a shift in how we connect ideas and people over the coming years (see Figure 1).

However, it does not exist in a Covid-19 vacuum. It reflects a broader movement that has been underway for some time. While this movement has been slow, over the past decade the cultural sector has gradually shifted towards embracing digital — not just online[3] — working.

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[2] Scottish Creative Sectors Survey (p10): **http://bit.ly/CS-Scottish-Creative-Sectors-Survey**

[3] We have included a glossary of key terminology within this report to help readers to understand and differentiate between some of the words we regularly use in discussions about digital technologies. In this instance, we want to clarify that using digital technology does not inevitably mean locating content online. The words *digital* and *online* are regularly used as interchangeable terms, but they mean very different things. These language hurdles can confuse and deter engagement.

Figure 1: Respondents were asked whether they agree / disagree with the 5 statements listed.
This graphic uses UK-wide data gathered via the Audience Agency's *Digital Audience Survey*:
**https://bit.ly/the-audience-agency-survey**
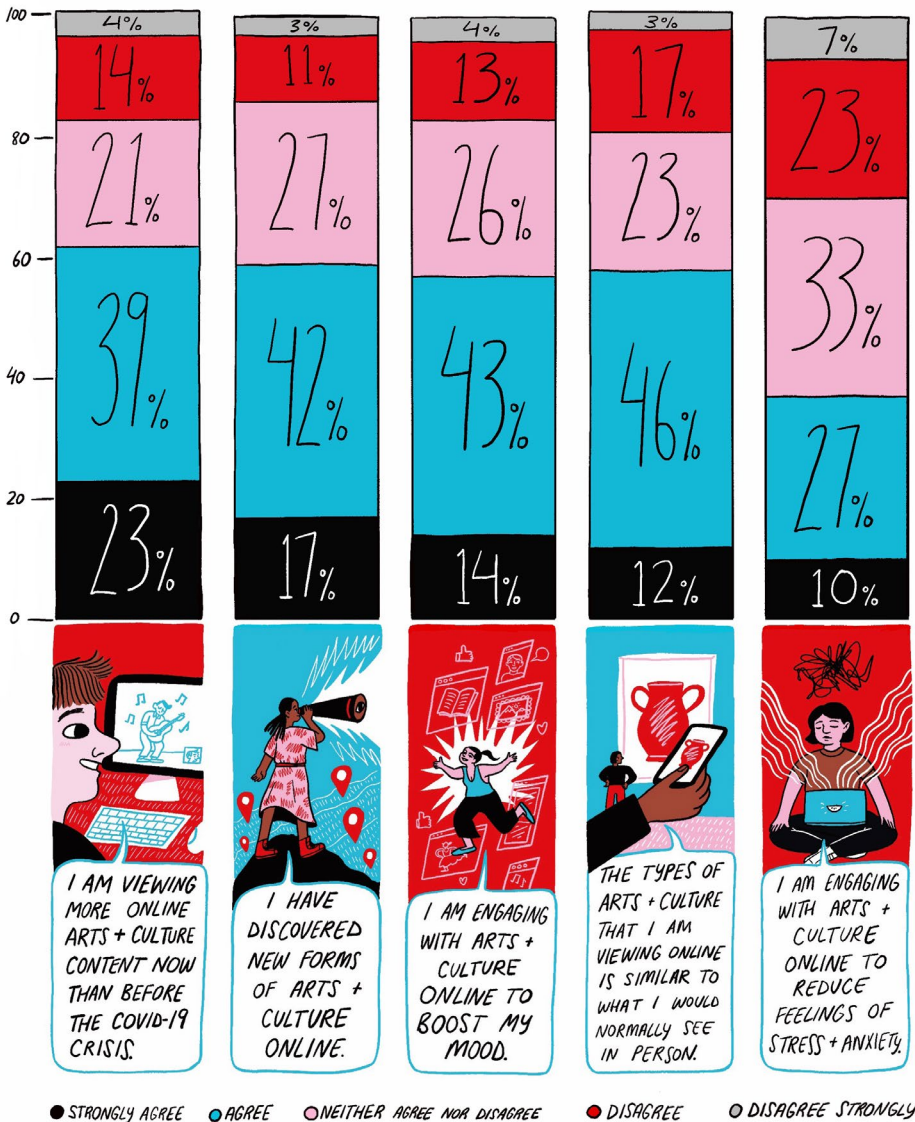


CREDIT: DATA FROM THE AUDIENCE AGENCY'S DIGITAL AUDIENCE SURVEY, DECEMBER 2020

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# Context / Fourth Industrial Revolution

One way of understanding this shift is via emerging jobs. Digital practice and associated roles have clustered in three main areas over the last decade or so:

- Audience engagement and marketing;

- Business development;

- Creative practice.

Digital marketing roles seem to have been the most rapidly adopted and widely spread. Within the cultural sector we have been more ready to adopt digital working (particularly its online manifestation) as a mode of communication with audiences and participants.

It has been more difficult to land the idea of using digital tools as materials, as part of the creative process. Business development and/or the exploitation of new opportunities to change or expand business models (broadly captured by the term digital transformation) has also been slow to take hold.

Since around 2011 a few Digital Producer jobs have appeared within larger cultural organisations. In a few isolated instances these have evolved to become Director level posts.

For example, The Royal Shakespeare Company appointed **Sarah Ellis** as their first Digital Producer in 2011. She has been Director of Digital Development since 2017, driving innovative creative practice powered by digital technologies.

To some extent, this slowly changing landscape has been fertilised by capacity building programmes supported by Government bodies and funders. For example, in 2011 Nesta, ACE and AHRC launched a pilot version of the *Digital R&D* programme, designed to support ideas using digital technology to build new business models and enhance audience reach.

The programme was rolled out in England, Wales and Scotland (with appropriate national partners) in 2012. This was followed by DCMS-driven research and policy implementation via the Culture is Digital project.

Figure 2

**Mixed reality [MR]**

A user environment in which physical reality and digital content are combined in a way that enables interaction with and among real-world and virtual objects. Unlike AR it does not layer digital content on top of physical reality, but blends the two to enable interactivity. It's sometimes called hybrid reality or extended reality [XR].

**Online**

The user is connected to or served by a system — especially a computer or telecommunications system such as the internet. Online has come to mean activities available or performed on *the internet*. Not to be confused or used interchangeably with *the internet* or *digital*.

**Open source software**

Software that is free and openly available to anyone. People who create open source products publish the code and allow others to use and modify it. Prominent examples include Google Chrome, VCL Media Player and Wordpress.

**Proprietary software**

Software that legally remains the property of whoever created it. You pay to license it. Prominent examples include suites of applications like Microsoft Office and Apple's iWork, as well as web platforms like Squarespace and Wix.

Here, Creative Scotland also commissioned *AmbITion Scotland* and *Sync*. The former was designed to support organisations to use digital technologies in order to grow business capability and capacity, while the latter focussed on digital innovation in the arts.

These initiatives were designed in light of global changes in behaviour that are usefully described as the fourth industrial revolution. While the first two industrial revolutions were driven by manufacturing, the third and fourth have both been born from digital advancements.

The third took place in the 1980s, with the birth of the personal computer and the internet. The fourth is a 21st Century revolution and is commonly understood to be driven by big data, robotics and AI (see Figure 2).

The Fourth Industrial Revolution is driving rapid and major change in human behaviours. We are still in the midst of the change, and our understanding of fundamental alterations to the way we live, work and relate to one another is unfolding.

However, we do know that a rapid fusion of technologies is disrupting almost every industry, in virtually all corners of the world. You can read more in the 2016 article by the World Economic Forum on the fourth industrial revolution.[4]

Data gathered by DataReportal in partnership with We Are Social and Hootsuite[5] for demonstrates how rapid and widespread this change is. In just one year (Jan 2019 to Jan 2020) the number of global internet users has grown by an astounding 7% (+298 million people). 9·2% more people across the world are now active social media users (+321 million).

The charts on the following page (Figures 3–4) show us how both internet use and mobile data consumption are changing over longer periods of time. We've chosen to show global trends, underlining that this is a change that affects us as humans inhabiting the earth. It is by no means unique to Scotland or the UK.

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[4] The Fourth Industrial Revolution — what it means and how to respond:
https://bit.ly/wef-fourth-industrial-revolution

[5] Digital 2020: Global Digital Overview:
https://bit.ly/datareportal-digital-overview

INTERNET USERS OVER TIME
IN MILLIONS

NUMBER OF GLOBAL INTERNET USERS
BY YEAR, WITH YEAR-ON-YEAR CHANGE
GRAPH: WE ARE SOCIAL · HOOTSUITE

2,831 — 2015
+11%
3,153 — 2016
+13%
3,570 — 2017
+5.1%
3,753 — 2018
+13%
4,241 — 2019
+7%
4,538 — 2020

EVOLUTION OF GLOBAL MOBILE DATA CONSUMPTION

7.2 GB

MONTHLY MOBILE DATA USED BY THE AVERAGE SMARTPHONE WORLDWIDE

MONTHLY AVERAGE GLOBAL MOBILE DATA TRAFFIC (UPLOAD + DOWNLOAD) IN EXABYTES (BILLIONS OF GIGABYTES), PER QUARTER

2.3  2.6  2.9  3.2 — 2014
3.6  4.1  4.7  5.2 — 2015
5.1  6.4  7.1  8.1 — 2016
9.7  10.6  11.7  13.6 — 2017
15.9  18.4  21.8  26.5 — 2018
29.0  32.7  36.5 — 2019

GRAPH: WE ARE SOCIAL · HOOTSUITE

The rapid onset of Covid-19 gave us a shock, in many instances forcing a swift rethink of how to connect ideas with people. However, it's important that we understand the broader context.

Those of us who have been working to build digital capacity within the cultural sector over many years understand this change to be vital. In the medium to long term, it's not viable for us to look away from the fact that we live in a world that is driven and powered by digital infrastructure.

There are also significant socio-political and moral drivers at play here. One of the cultural sector's primary roles is to identify and tell the stories that help us to understand ourselves. The Fourth Industrial Revolution brings fundamental changes to how we live, how we work and how we relate to one another.

We're seeing a merging of the physical, digital and biological worlds for the first time, and this is happening at pace and scale. As a sector we have been surprisingly slow to engage with this. We are only now beginning to mainstream the use of digital tools and data as ways of exploring the complex transformation that they bring about.

We'll go on to discuss some of the reasons for this in the **Findings** section. Suffice to say they are systemic and complex. The most commonly discussed barrier to change and engagement is unsurprisingly lack of resources, both funds and time.

In addition, as Golant Media Ventures point out in their report titled *The adoption of digital technology in the arts* (written in 2017 as part of the Digital Innovation Fund for the Arts in Wales):

*There are major structural challenges which are common across the voluntary sector, social enterprise, the public and private sector, not in the artist alone. These include the need for:*

▶

*Trustees, patrons and funders who 'get' digital;*

▶

*Sustained funding for R&D work — with support which continues after project end;*

▶

*Sectoral skills development;*

▶

*Commercial and technical partners who understand the specific needs of the sector.[6]*

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[6] The adoption of digital technology in the arts:
https://bit.ly/nesta-adoption-of-digital-technology-in-the-arts

## Terminology [R–U]

**Remote**
The user is not in the same place as the work. If you're creating a piece of work that is for remote users, then you're suggesting that it can be experienced anywhere, the audience is distributed.

**Software**
The programs and applications that run on the computer or other electronic device (*ie* hardware). Software is a collection of instructions that tells the computer or electronic device what to do.

**Source code**
A set of human-readable instructions and statements written for a computer by a computer programmer using a programming language. There are a number of different programming languages. Different programming languages often do not work together.

**Technology**
This word has multiple definitions, but often we find it being used to describe the equipment that has been developed through the application of scientific knowledge or processes, for example a computer or a mobile device.

**User**
A person who operates something. When making work that's deployed using digital tools it might be more appropriate to talk about the user than the audience member or participant.

**User experience [UX]**
The overall experience of a person using a product such as a website or computer application, especially in terms of how easy or pleasing it is to use.

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# Context / The Digital Pivot programme

Suzy Glass and Ashley Hammond-Smith designed the **Digital Pivot** project against this backdrop. It was born out of the Covid-19 pandemic, commissioned by Creative Scotland as a way of giving one-to-one support to artists, creative practitioners and organisations when they needed it most.

The central aim was to support people to negotiate and reposition their content so they could use digital tools to engage now that in-person interaction was off the cards. We targeted individuals and organisations who were interested in working out how to use digital technologies in their creative practice.

While we were aware that there are people who need to know more about social media marketing or develop their basic digital skills, we know that a number of service providers already provide high quality, tailored support that both individuals and organisations working in the cultural sector can access. We signpost some of these in our reference library, which you can find in the **Appendices**.

We launched the programme in May 2020 with two public facing workshops. Suzy introduced the Digital Pivot process to approximately 80 people in a live video presentation delivered via Microsoft Teams.

We crowd-sourced key discussion points from attendees prior to the events, enabling Suzy to steer content towards existing concerns and gaps in knowledge.

Chat was open throughout, allowing conversation to build. People were invited to ask for clarification or ask additional questions as the session progressed.

Following a selection process, Suzy worked with twenty-two practitioners working across eight artforms, based in seven of Scotland's local authority areas.[7] Each person or group of people had around three hours of time with Suzy.

Every approach was tailor-made to suit the specific needs in play. Some people had clearly defined ideas that they wanted to workshop and sense-check over a condensed period of time. Others needed to engage in more open conversations about digital working, requiring longer to process learning in between sessions.

This report will capture and share key learnings that are of value to the sector more widely. It will be useful for you if you are embarking on a journey to embed digital technologies within the heart of your practice. We think it might also inform sector-support agencies and public bodies looking to support this type of working.

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[7]  See Appendix 1.

## Terminology [V–Z]

### Virtual reality [VR]

The use of computer software to create the effect that the user is in an alternate 3D environment to reality. It is often (although not exclusively) experienced through a headset.

### White label

Software built by one company that another uses and rebrands as its own. Examples include Shopify, or various app builders that allow you to build and brand your own mobile app using a sequence of templates.

### World Wide Web

A collection of web pages found on the internet that can be accessed via a web browser. Often referred to as www or 'the web' for short. Not to be used interchangeably with *the internet*.
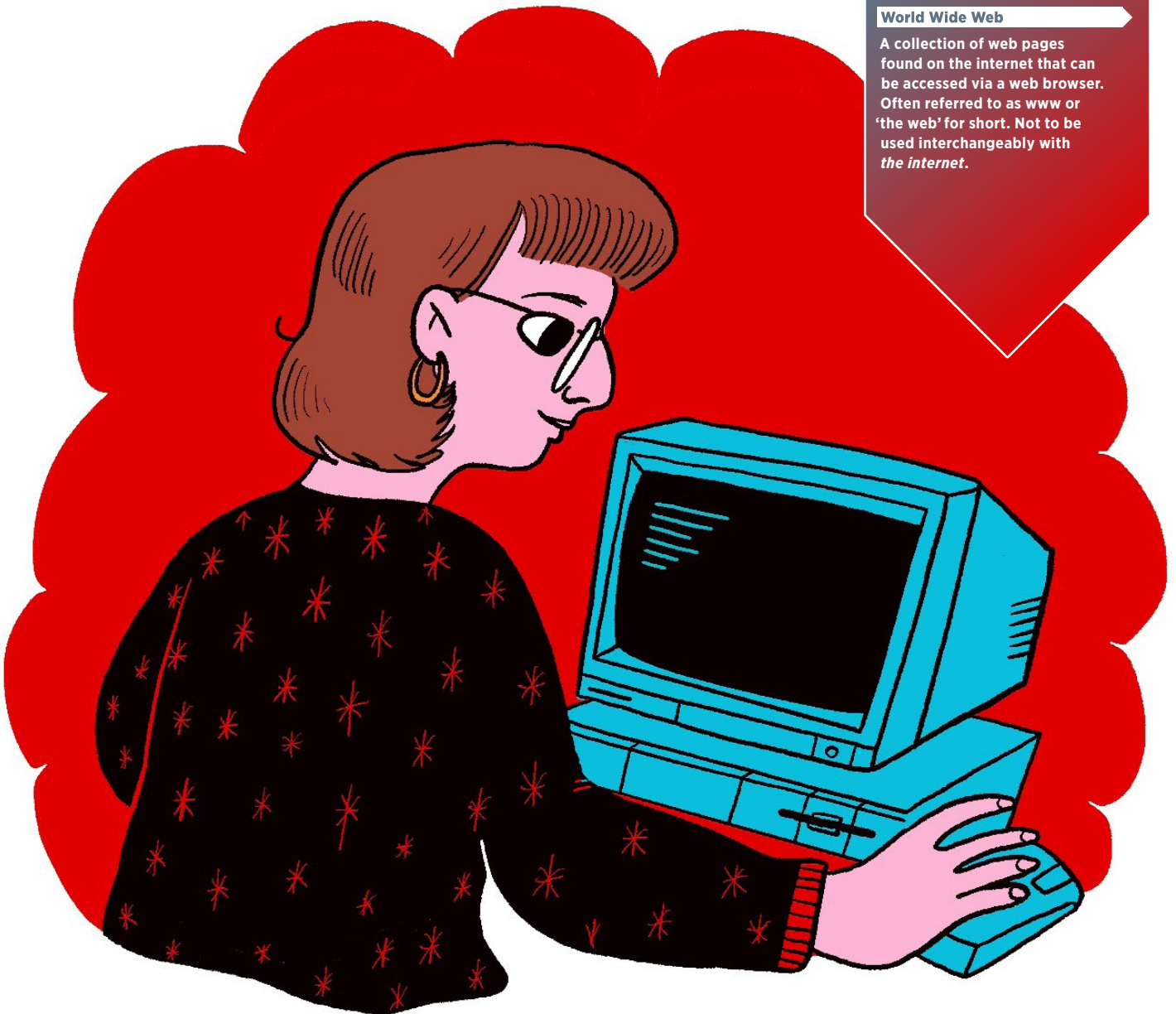
# Findings

This section introduces and explores challenges and opportunities brought to the Digital Pivot project by participants. Here we look at competencies, processes, methodologies and models. We explore ways of underpinning, improving and sustaining engagement with, and experience of digital practice.

Each participant's Digital Pivot journey was unique, reflecting differing levels of experience and need, as well as differing mindsets and skills. However, some similar concerns and blockages repeatedly appeared. As a result, there were a number of suggestions and references that also kept appearing. We explore these in detail over the next few pages.

We have split this section into three, to reflect the characteristics and trajectories of Individual Practitioners, Producing Companies and Venue-based Organisations. These three categories are not wholly distinct from one another; needs and approaches to working with technology can and do bleed across all three. But we have found it a useful framing device, allowing us to use different lenses to layer in some of the complexities of this period of significant change and adaptation.

We have tried to present this section without artform or genre bias. We designed the Digital Pivot project to be artform and genre agnostic. Occasionally we have encountered language and material that doesn't map particularly well across different specialisms. We try to unpack this whenever it arises.

# Individual practitioners

## Anxiety, disconnect and overwhelm

The first Digital Pivot sessions with Individual Practitioners were characterised by a blend of anticipation and trepidation. Every participant expressed some excitement about the opportunities they could see opening up in front of them. But there was also a strong current of anxiety — would it be possible to evolve practice without experiencing loss?

In some instances, the trauma of living through the first few months of a pandemic felt very live. People talked about how uncreative they had been feeling, describing a sense of stasis. Some suggested they felt trapped and rudderless. A number of participants had seen live projects fold within a matter of days. For others, commissions that had been due to start imminently had been cancelled. A few people had been asked to move their work online. This felt challenging, because of skills and knowledge deficits and/or because of lack of inclination.

For everyone, there was a strong sense of disconnect: how am I supposed to engage meaningfully with people if I can't bring them together in a physical space to experience the work I create? How do I maintain authenticity and connection when I'm channeling my ideas through a small screen?

> Learning points

When faced with the need to engage with digital technology for the first time, people tend to experience anxiety and to some extent fear. This is partially explained by limited skills and knowledge — it can be difficult to engage with anything that sits outside of your existing skillset, it's hard to know how to begin the journey. Filling out a skills and knowledge audit is a good way of identifying gaps and associated training needs.

A couple of good examples include *Scotland's Essential Digital Skills Toolkit*, developed by SCVO[8] and *Digital Culture Compass*[9] which has been built specifically for the cultural sector.

With digital technology there seems to be something else at play. Practitioners appear to be apprehensive, articulating a specific concern that digital tools will alienate and distance audiences and/or participants. Suzy worked with all Digital Pivot participants to challenge assumptions about how work powered by digital technologies might look and feel. The possibilities are virtually endless. We'll go on to outline some of these later in this report.

There seem also to be concerns that embracing digital technologies will require or result in major changes to practice. This is derived from the same set of assumptions — that work powered by digital technologies has a set of defining characteristics. By reframing this, starting with an understanding that digital technologies can enable pretty much anything, it is possible to move away from anxiety towards empowerment. The focus moves away from changing practice towards extending, deepening and evolving practice.

## Fixed vs growth mindset

The more successful Digital Pivot processes were characterised by an openness to experimentation.

Some individuals described themselves as digitally illiterate. But they proved themselves to be as capable of engaging deeply and energetically with ideas and direction of travel as peers who come to digital working with a little more skill, knowledge and experience … if they applied a growth mindset to the process.

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[8] https://bit.ly/digital-participation-charter

[9] https://bit.ly/digital-culture-compass

Some of the people Suzy worked with expressed concern about their own lack of knowledge, inability to get on with technology, and/or a mistrust of or antipathy towards digital tools. Statements took the form of sweeping generalisations: 'it's not for me,' 'I can't do it,' 'technology hates me.' Taken in the round, they amount to a blanket rejection of 'something.' That 'something' takes on different forms in each individual's mind.

One person's idea of digital working is very different to the next person's. Each personal mythology rarely aligns with the realities of working with digital technologies. As above, there's a great deal of (sometimes subconscious) stereotyping — 'digital is a video uploaded to YouTube' or 'digital is multiplayer gaming.' Again, the reality is that digital tools can enable virtually anything the imagination settles on to take shape (resources allowing).

In many instances individuals were not able to express tangible, specific concerns about working with digital technologies. In part this is because they found themselves in new territory: it's hard to articulate what you can't do when you haven't tried something. But it's also indicative of a fixed or possibly a deficit mindset.

## Learning Points

When people approach things with a fixed mindset, they assume that 'our character, intelligence, and creative ability are static givens which we can't change in any meaningful way.[10]' On the other hand, someone with a growth mindset 'thrives on challenge and sees failure not as evidence of unintelligence but as a heartening springboard for growth and for stretching our existing abilities.[11]'

To engage effectively with digital technologies requires curiosity and a desire to look for potential. Suzy worked with individual practitioners to peel away destabilising cliché and disabling mythologies. By surfacing and discussing tensions, she created space to shift the focus, engaging instead with possibility and the excitement of the not-yet-known.

It's difficult to do this without input from a third party. If you are looking to find ways to explore using digital tools, but simultaneously noticing a tendency to generalise and block, then you need to find a producer or a creative technologist who can help you to shift your perspective. There are an increasing number of clubs and apps where you can meet creative technologists. For example, **Tinderbox Lab** is a digital arts studio and maker-space based in Edinburgh.

## Relationships

At some point during the process, most participants asked, 'who do I need to work with to make this happen?' To make work using digital tools and technologies that you haven't used before, it's important to look beyond existing networks to find the right people to build a team.

People who use digital tools are specialists. They know how to do something that requires skill and knowledge. Sometimes they take on the role of a technician and provide a service: the equivalent of a joiner, or a sound engineer, or even a graphic designer. Sometimes they take on the role of a creative practitioner and become a collaborator: the equivalent of a choreographer, or a writer, or a co-director.

It was clear that some of the Digital Pivot participants needed to find a supplier. These people had a relatively clear idea of what they wanted to make, and needed someone to build it for them. Other participants needed to meet and develop a collaborative relationship with a person or a group of people, to unlock the vision and potential of their early stage ideas.

[10] Maria Papova, **https://bit.ly/maria-popova-fixed-vs-growth**
[11] Ibid

**Learning Points**

There's no shortcut or secret way of finding a technologist you want to work with. You need to do some or all of the following:

- Ask for recommendations;

- Research technology-driven creative projects and approach people who created things that appeal to you;

- Initiate a formal or informal recruitment process.

As ever, getting the chemistry right is critical, particularly if you're looking for a collaborator. Take the time to meet people and ensure you click.

There are some approaches that work better than others depending on the stage and complexity of the type of work you're wanting to create or the change to your practice you're looking to implement.

If you are working on early stage concepts, consider a residency-style approach. This involves building an R&D environment in which you and a technologist might sense-check ideas, develop a broader understanding of possibilities, and test some approaches.

The technologist can also help develop an understanding of the effort and resources required to build a project idea, and how much it might cost. This approach is well-suited to building collaborator relationships: it creates space and time to develop a connection as well as ideas.

If you already have a resourced project with milestones and deliverables (either a new project, or something you are pivoting from a live setting), consider one of these two approaches:

- Recruit a Production Manager with experience of working with technology or a Technical Manager. This person will be able to help you specify technology requirements, manage workflow and oversee delivery of the technical aspects of production. This is a particularly good way of working for people who are building complex durational and/or site-specific work that relies on digital technologies.

- Write a brief that outlines what a technologist is needed to do, including a budget scale. Go through a recruitment process, placing your advert on cultural as well as technology platforms. This approach is obviously best suited to people who have clarity around outputs and deliverables. It is appropriate for people who are making web or app projects.

Be aware that market rates within the technology sector are significantly higher than in the cultural sector. Technologists tend to build commercial products, and they charge accordingly.

While some technologists are able to apply third sector/charitable rates when working on cultural projects, when you're budgeting you should anticipate day rates coming in at double or even triple the amount a cultural sector technician might be paid.

Without exception, it is useful to partner with a producer who has some experience of steering technology projects. This will increase costs, but it should also improve your chances of securing funding and developing a realistic project scope and plan. You can expect a producer to support you to design a process, write briefs, and recruit a technology partner. Once the technology partner is on board, a producer will work with the team to develop costs and schedules, as well as run the delivery process.

# Case study / Tony Mills

Tony Mills[12] is a dance artist from Orkney. He has worked with companies including State of Emergency, Curious Seed, David Hughes Dance Productions, All or Nothing Aerial Dance Theatre, Derevo, and Blaze — the international streetdance show.

As a choreographer, he assisted Ian Spink on Scottish Ballet's EIF production *Petruska*. He has worked as a movement director / choreographer in theatre for companies including Terra Incognita, and commercially for stars including Kelly Rowland.

Tony came to the Digital Pivot programme with a project that had been derailed by the onset of Covid-19. He was working with the British Council to relocate *At Your Leisure* to Hong Kong.

*At Your Leisure* is a festival of dance and sport, co-designed with young people. In 2018 it was supported as part of the Scottish Government's Year of Young People programme.

Tony was intending to deliver an international reboot of the work throughout 2020, travelling periodically to Hong Kong to work with local artists and students to re-imagine and produce the project for its new setting. As the pandemic took hold, it became apparent that the travel element of the project would be shelved. Tony needed to establish how he would continue to work remotely with colleagues in Hong Kong in order to understand audiences / participants and produce something meaningful.

The 'something meaningful' was creating discomfort. Tony was recoiling from the idea of creating screen-based outputs. He knew they wouldn't do justice to this innately physical piece of work. Movement is the beating heart of the project: people visit various sports environments (gym halls, squash clubs, swimming pools, *etc*) where they encounter performers — other bodies in space — encouraging them to watch and participate.

We shifted the focus towards hybrid working, looking at digital technologies that allow us to expand or layer content within the physical world. Tony seemed particularly interested in the possibilities of augmented reality. We looked at examples of work together. These included Childish Gambino's *Pharos AR*, a multi-user augmented reality app built to allow people to experience audio and visual elements of Gambino's *Pharos* tour through a mobile interface.[13] Made closer to home, Edinburgh-based Brightside Studio's experiments with AR demonstrate how it can be used as a storytelling tool, by integrating mobile interfaces to layer imagery and video onto and into physical items.[14]

We talked about using augmented reality to locate dance artists in a physical landscape, anchoring them in the physical world without the need for them to actually appear there. We discussed how it might be possible to design a series of Covid-19 safe interactions. Perhaps people would encounter performances designed for particular sports sites at any time of the day via their mobile phones, rather than having to attend at a designated time with a number of other audience members.

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[12] https://bit.ly/room-2-manoeuvre
[13] https://bit.ly/google-childish-gambino
[14] https://bit.ly/brightside-studios-AR

We also explored how AR and print can work together. What if Tony were to work with associates in Hong Kong to write a magazine, and at key points there are gateways within the print, triggering performances that appear to emerge from the paper? We considered whether it would be wiser to delay all thoughts of producing a site-specific piece, and instead focus on information sharing and knowledge exchange: using technology as a way of enhancing and bringing content to life.

Tony came to everything with an open mind. He was generous with his ideas, bringing them into conversation with a sense of curiosity. Working together, we were able to test new directions and play with concepts that we felt were pushing at boundaries. After three short sessions, Tony felt confident enough to take some of the approaches we had discussed into new territories, and is currently working with a number of creative technologists to explore various born-digital projects driven by different technologies.

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# Producing companies

For the purposes of this report, we are using the Producing Companies label to describe all companies that do not manage or run a venue. These companies tend to have the following characteristics in common: they employ a small number of people, they are familiar with contracting freelance associates on a project-by-project basis, they have clear organisational purpose, they have limited or non-existent in-house digital skills.

## Understanding audiences

Almost all of the producing companies who took part in the Digital Pivot programme have a refined sense of who they produce work for and why. Until Covid-19 hit, they knew how to sculpt work that appealed to their audiences and in general was well-received. They knew how to market this work. In addition, some also had a good grasp of digital marketing, including how to use social media to engage with key demographics.

Conversely, there was limited understanding of digital behaviours beyond engagement with sales messaging. For example, participants had no knowledge about the devices their target demographics were most likely to have access to. They didn't know whether they were more likely to be reliant on data or fibre connections. They had no sense of whether their target demographics spent hours on their laptops gaming at the weekend, or whether they resented being forced to use their computers for everything.

Most of the Digital Pivot sessions with Producing Companies began with Suzy encouraging participants to audit their target audiences, finding out as much as possible and using this information to support their creative process.

### Learning Points

It is important to get to grips with digital access and behaviours before beginning to make work. There are many variables in the mix, including type of device, broadband access and speed, confidence and ability. This makes it difficult to second-guess what will and won't work for people, both literally (*eg* is their home broadband connection fast and stable enough to support a livestream?) and conceptually (*eg* are they confident and skilful enough to experiment with an augmented reality app?).

When you invite someone to come and engage with your work in a theatre, concert hall or a gallery, you're bringing them into a fairly controlled environment. When you offer someone the opportunity to engage with your work in an online setting, you're releasing content into an infinite number of spaces, none of which will behave in exactly the same way as the next.

Moreover, the internet is a large and very competitive place. There are a lot of big media brands using it to connect content with people; they have a) huge budgets and therefore high production values, b) major marketing resources, and c) a lot of data-driven audience research to draw on. It is risky to make something, upload it, and then cross your fingers, hoping that people might stumble across it. They probably won't. There are other content creators who are better equipped to make sure they reach your audiences first.

The key here is to continue to build a relationship with the people you're trying to reach. People make the assumption that creating work for distribution via the internet means you should automatically be able to extend and expand your audiences. While this might be something you look to do in the medium to long-term, to begin with it's wise to focus on the people who you know are committed to your work. Work with them to establish how you can connect with them authentically, adapting your work and/or practice so it embraces digital technologies in an appropriate and effective way for all those involved.

Begin by carrying out an audit. Find out everything you can about your target audience's digital habits:

> **"**
> It is risky to make something, upload it, and then cross your fingers, hoping that people might stumble across it. They probably won't. There are other content creators who are better equipped to make sure they reach them first.

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Do they spend any time online? If so where? How long are they normally there for? At what time(s) of day? Do they have a fast broadband connection, or are they reliant on patchy data? What hardware do they typically use— a computer with a large landscape screen, or a tiny mobile device that they tend to keep in portrait mode? Do they listen through the (tinny) built-in speakers or do they use high quality headphones? Are they confident digital natives, or are they frightened by online environments? And so on.

Once you know the answers to these questions, you're in a much stronger position as you move into your R&D and design phases. For example, you are sure that the technology you're planning on using is familiar to your audience. Alternatively, you are sure that the technology is new to your audience, and you therefore know that you'll need to build some skills development into your programme of activity.

Another example: if you're livestreaming, you'll know what time of day is most likely to work for people. If you make performances and most of your target demographic are parents with young children, in all likelihood a 7pm start is going to be tricky for them. When they visit a theatre, they ask someone to babysit; they won't when they're livestreaming something into their home.

The same is true of access to hardware and broadband or data. Once you've asked the questions, you can be certain that your target audiences will be able to access the work you're about to create.

In many instances the tools that you use to deliver (and in some instances create) digital work can provide you with useful data, helping you to measure the impact of your work. While analytics only provide part of the picture, the insights you can gain are valuable. Once you make a decision about the tools you're going to use, go on to explore the types of data they enable you to gather. You then build this into your evaluation plan.

## Dealing with instability

Making work while living through a pandemic inevitably means more time spent attempting to navigate risk. All participants in the Digital Pivot programme were keenly aware of uncertainty, articulating concerns not only about the number of variables at play but also their inherently unstable and fast-moving nature.

Working with new tools and technologies destablises things further. Many of the Digital Pivot participants had limited or no experience of developing and producing creative work with digital tools and/or for online platforms. They therefore had limited or no experience of appropriate processes and methodologies.

In addition, some of the tools and technologies discussed during Digital Pivot sessions are emergent —either completely new (*ie* just invented), or newly available within the mainstream marketplace (*ie* no longer the preserve of whichever industry they were developed within). This means that they bring with them absolute unknowns, and require a prototyping or innovation-minded approach to production.

To navigate complexity, it is vital to use methodologies that build adaptation into the process. Uncertainty is now embedded in the intellectual, emotional and physical landscapes that we live and work within. It is no longer appropriate, or often possible, to define detailed outputs at the start of a process: there aren't enough knowns at concept stage to articulate with confidence what the finished product will be, where it will appear, and who will be able to engage with it.

The default operating landscape for people who design and build software resembles the description above. Their world is peppered with uncertainty and a high number of variables, because they invent and make things that don't yet exist in the world. For them, using a sequential or linear production model (Waterfall project management, Figure 5 on p23) creates more problems than it solves.

It is impossible—or at least counterintuitive—to rigorously design a project upfront and then follow a designated pathway until the piece of software has been realised. This approach doesn't create enough room for experimentation, nor enough space to learn and fold new knowledge into the project as the process plays out. Waterfall approaches don't allow for ongoing testing and therefore the capture of bugs and other problems.

## Agile management

At around the turn of the century, a new type of project management emerged that enabled software developers to build their projects in a more organic, cyclical manner. Agile is a methodology that's based on iterative development and testing. It's also a way of working that enables teams to deal with uncertainty and turbulence.[15]

The Agile approach creates more space for collaboration, experimentation and play. The driving focus is outcomes, not outputs. When you're using Agile, you begin by articulating the problem or opportunity, and the changes you will make in the world by broaching this. You don't zero in on a solution. Due to the emergent nature of software development, teams often can't know exactly what they're going to make until they start prototyping — this is when they start to imagine and understand the possibilities.

Next you start to work in a series of contained cycles, these are normally called sprints. You're working within an overarching roadmap — you know broadly what your milestones are. But there is no detailed task list and delivery plan that will take you from your starting point to completion.

These cycles are like a series of mini development or production processes. Each one contains very short phases of planning, design, production (this is called development in software circles), testing, deployment and feedback (often called review in software speak). You analyse what you've heard, and you start the cycle again.

Via these iterations, you move gradually with your team and often your target users/participants/audiences towards an end point. By working in the open, you prevent yourself from making any assumptions that might derail your project. You capture and deal with bugs at an appropriate stage.

It's up to you to decide who you bring into the feedback loop, but you probably want to consider testing with the whole creative team and a group that is representative of your target audience/users.

The aim here is to shift the narrative around failure. Any bugs and challenges you capture are mini opportunities to improve and strengthen, they are not indications that things have gone wrong. Agile is an inherently adaptive way of working, allowing you to respond nimbly to changing circumstances as more information comes into play. Those of you who work with performance might recognise some scratch principles in here. It can also be useful to draw parallels between Agile and other creative processes like improvisation and devising — you use similar energies and approaches.

Agile is growing beyond its origins as a process that guides software development: it is now commonly applied as a project management system in other sectors and increasingly as an organisational or cultural philosophy. As NESTA point out in their *Innovation Squared* work:

> *To facilitate innovation, leaders and managers are now looking to spread the benefits of 'agile' project management methods from teams to entire organisations and to new sectors.*[16]
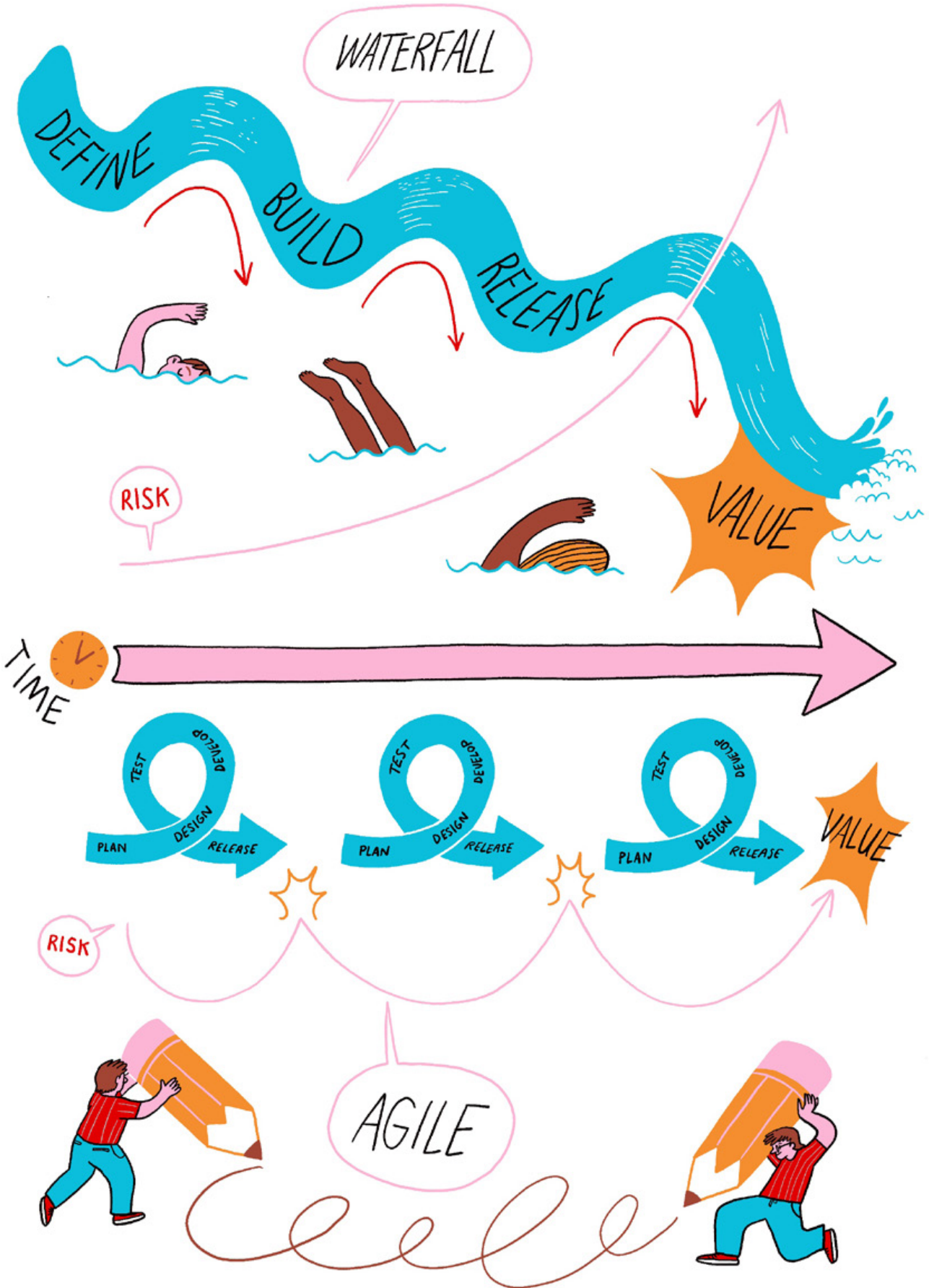
> " Agile is an inherently adaptive way of working, allowing you to respond nimbly to changing circumstances as more information comes into play.

[15] https://bit.ly/the-atlantic-agile
[16] https://bit.ly/nesta-scaling-agile

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Figure 5

### The Double Diamond

Regardless of whether you use Agile principles and/or methodologies, a design-led approach is useful when working with digtial technologies. In 2003, the Design Council developed the Double Diamond as a visual representation of the design and innovation process: 'It's a simple way to describe the steps taken in any design and innovation project, irrespective of methods and tools used.'[17]

As illustrated in Figure 6, this approach creates the opportunity to expand and deepen ideas (the first diamond) before focussing in and building the work (the second diamond). Instead of diving straight into an active production period, time is set aside to build a thorough understanding of problems, issues and opportunities. Examples from the Digital Pivot process include: 'how can we reach geographically remote people?', 'can we use digital technologies to make our work more accessible?' and 'is it possible to build digital technologies into my practice without sacrificing authenticity and intimacy?'

The first diamond encourages you to expand your thinking. During this phase of work you discover more about how people are likely to behave and respond to your work. This then informs and defines the decisions you start to make.

The second diamond supports you to continue to work collaboratively. However, here you converge your thinking. By now you have clarity around the issues you're dealing with, and can begin to co-design or at least test ideas with users. You start to prototype and deliver solutions, building towards something that has been through a continuous improvement process.

### Budgeting & Intellectual Property

A quick note here about budgeting and intellectual property. These iterative, exploratory processes require a more flexible approach to budgeting. It's very difficult if not impossible to complete a detailed costing at the start of the project. Instead you need to assign a bottom line, and then budget precisely against each iteration, releasing cash into the short sprints.

If you're applying for funding then you will need to be able to identify a rough overview of costs. In reality, the majority of technology projects are people-heavy. If you know the timeframe you're working within, you can forecast an indicative spend on human resource. Your contingency should be set higher (as a percentage) than the amount you would set if you were using a more straightforward linear process. This creates room for you to capture and deal with unknowns, variables and risk. Agile management training can help you to learn more about this element of the process.
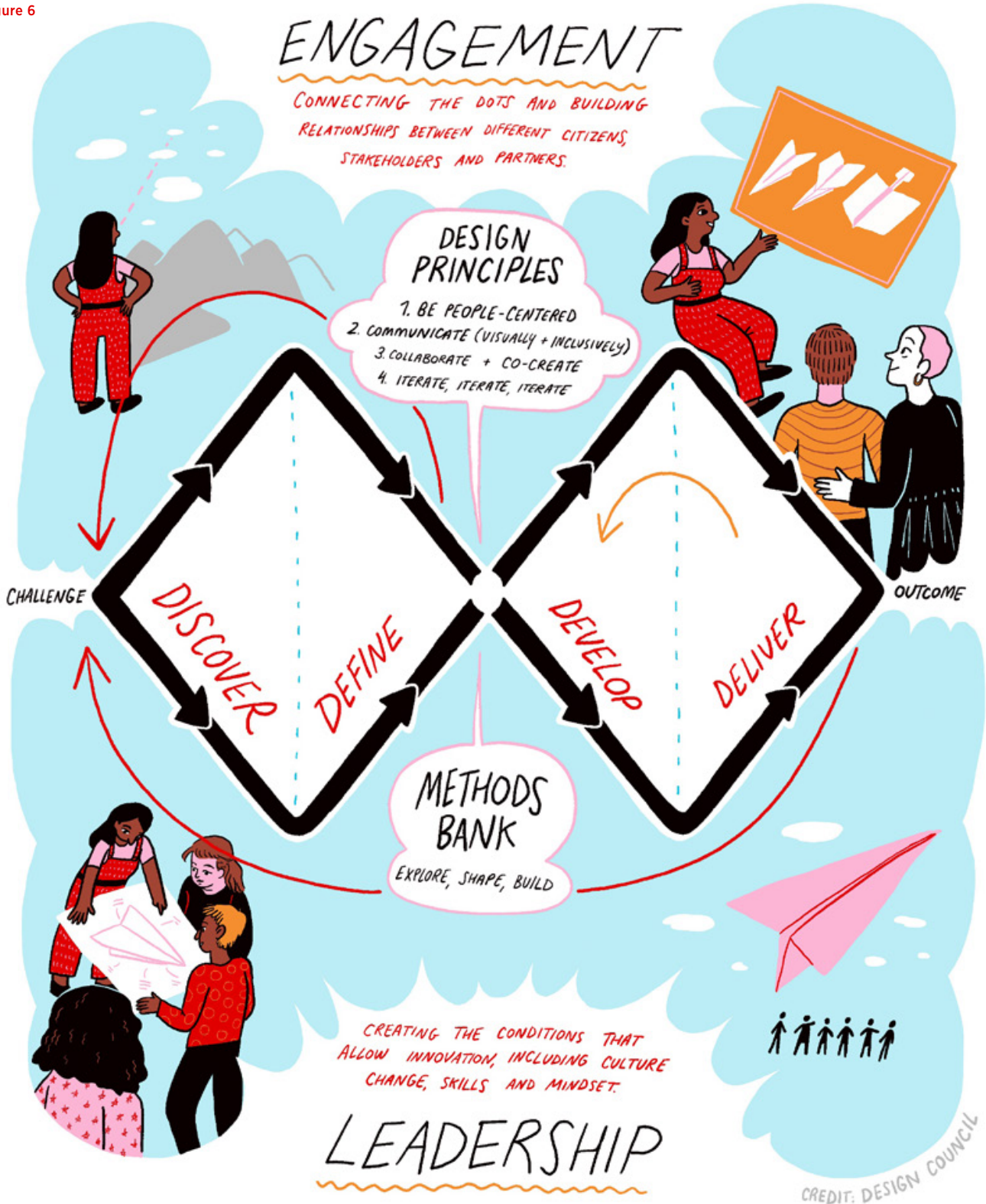
Intellectual property is potentially a thorny issue. Projects created for online settings can become complex from an IP perspective, in part because we don't yet have any understanding of how platforms might evolve over the coming years and decades. In other words, we can't articulate a clear roadmap describing how core elements of the work will continue to manifest over time. This makes it critical that you understand who owns what within the project when you embark on something with partners.

It can also be onerous to establish which licenses you need in order to use music and images generated by other artists. Just one example: online work can be accessed by a global audience, whereas blanket licenses (*eg* those issued by PRS) tend to cover use within one nation. If your work features a lot of third party assets, make sure you have allowed time and resources to unpack licensing issues.

As with any work, there is no one single way to go about managing and assigning IP. if you are making a project that is driven by digital technologies it is good practice to build legal fees into your budget. Aim to work with a lawyer who specialises in intellectual property and media production, they will help you to clarify terms at the start of your project.[18]

[17] https://bit.ly/design-council-double-diamond

Figure 6



ENGAGEMENT

CONNECTING THE DOTS AND BUILDING RELATIONSHIPS BETWEEN DIFFERENT CITIZENS, STAKEHOLDERS AND PARTNERS.

DESIGN PRINCIPLES
1. BE PEOPLE-CENTERED
2. COMMUNICATE (VISUALLY + INCLUSIVELY)
3. COLLABORATE + CO-CREATE
4. ITERATE, ITERATE, ITERATE

CHALLENGE

DISCOVER  DEFINE  DEVELOP  DELIVER

OUTCOME

METHODS BANK
EXPLORE, SHAPE, BUILD

CREATING THE CONDITIONS THAT ALLOW INNOVATION, INCLUDING CULTURE CHANGE, SKILLS AND MINDSET.

LEADERSHIP

CREDIT: DESIGN COUNCIL

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[18] There are a number of resources and sources of support you can currently access to help with IP. These include Serpentine's *Legal Lab*: https://bit.ly/serpentine-legal-lab which explores how the law can better support collaborations across art, science and technology;

The Space's *Digital Rights Toolkit*: https://bit.ly/the-space-digital-rights which is helpful particularly if you're looking to publish work on online platforms;

Culture Hive's *Asset Management Report*: https://bit.ly/culture-hive-asset-management which explores how IP sits alongside a number of other assets typically owned by a cultural organisation.

# Case study / Birds of Paradise

Birds of Paradise (BOP) is an inclusive touring theatre company, working with disabled and non-disabled professional artists.

The company has a vision of a culture where disabled artists are recognised for the excellence of their work, are celebrated for the stories that they bring to the stage, and are understood to be a vital part of Scotland's artistic landscape.

BOP produces world-class productions and projects, placing disabled artists centre stage and developing future generations of disabled artists. The company also offers training and consultancy in disability arts. BOP came into the digital pivot process with a well-developed project concept, a clear understanding of target audiences…and virtually no experience of making work driven by digital technologies.

*Locked World* is a BOP Young Artists initiative developed by, and for, young disabled people. The name and idea originated from a young artist's description of their experience of being autistic —neurodivergent. It was originally conceived as an immersive performance experience consisting of a number of different pieces of work describing different experiences of and opinions about being disabled.

When it became clear that Covid-19 would prevent the project from going ahead in its original form, the team began to explore the feasibility of re-versioning *Locked World* for an online environment. From our first conversation, it was apparent that the idea of working with new formats and platforms was generating excitement and a sense of possibility.

With the onset of pandemic-driven lockdowns, the subject of the project had assumed another layer of meaning, deepening the existing rigour. There was also agreement that digital working had a particular resonance both with the concept and with participants / audiences.

From a company perspective, BOP understood that they could use this moment as an opportunity to extend their work beyond live environments. It had become possible to design and create online stories and environments (born-digital projects) that embodied the company's aims and values.

BOP had already commissioned a feasibility study exploring possibilities for *Locked World*, and were waiting for documentation that would outline options including potential website structure and technical approaches. With this in mind, we focussed our conversations on a) unpicking and sense-checking the BOP and young artists' assumptions about digital working, and b) exploring processes and methodologies that are useful when producing work for online environments.

We discussed things to look out for when commissioning and contracting technology partners: how IP can be moved around a project as well as things that might go wrong if IP isn't considered and assigned at the start of a project. For instance, if you start building a project and the relationship with the technology partner turns sour then by default the author of the code retains ownership. The implication of this is that you then can't take that code elsewhere and continue from the point the original developer had reached.

We also explored the idea of white labelling. Could BOP think about the *Locked World* build as a prototype that might go on to act as infrastructure that could house a number of different stories or ideas? Perhaps BOP would be able to use the framework again. Maybe they would be able to license it to other producing companies.

Unsurprisingly, the company's careful and expansive thinking around accessibility was leading to original ways of thinking about how people could tailor their experience to suit their needs. Suzy flagged that it would be wise to consider how to talk about and share this functionality, and whether it could potentially generate income.

We talked about the differences and similarities between producing work for live settings and producing work for online settings. What is the producer's role? Do we use existing tools and methods when team make-up and outputs are going to look very different?

Working with digital technologies intensifies but does not essentially change how a producer approaches an idea and process. It heightens the importance of listening carefully, interpreting and translating where necessary. Digital teams are generally made up of people with very different backgrounds and skills. They tend to speak slightly different languages, using the same words to mean completely different things — they may not realise this is the case, creating the conditions for misunderstanding and derailment. They are used to different work cultures. A major task for the producer is to sit in amongst this, synthesising and finding ways to bring sometimes conflicting needs and processes into alignment.

There are three things that stand out about BOP: their uncompromising approach to access and inclusion, their rigorous attention to target audience needs and wants, and their desire to learn. These attributes combine to mean that the company has embraced digital technology with determination that they will find ways to apply their unique perspective and drive to new environments. Perhaps because of their ongoing relationship with barriers that can hinder or prevent participation, they have a positive relationship with change. They are using Agile principles to drive exploration and experimentation, and as a result their first major online project will no doubt become a significant milestone for the company.

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# Venue-based organisations

The last part of this section focuses on venue-based organisations. For these organisations, the building itself can magnify issues and opportunities. More often than not though it was the size, age and culture of the organisation that brought needs into relief. As above, the term 'venue-based' is useful as an indicator, but doesn't mean individuals and other types of organisations won't find this section relevant.

The characteristics of venue-based organisations include: a significant number of employees distributed across distinct teams (including volunteers), multi-stranded mission and aims, some in-house digital marketing skills.

## Organisational culture vs projects

While these organisations came to the Digital Pivot process with specific problems and associated projects, they felt somehow peripheral to core organisational vision. The projects read as bolt-ons: the soul and spirit of the organisation was not coursing energetically through early-stage thinking. Perhaps predictably, enthusiasm was therefore relatively low. There was a strong sense of ambivalence — if not reluctance — about engaging with digital working.

It's hard to underline enough how distressing and destabilising Covid-19 has been for participating venue-based organisations. Repeating lockdowns and restrictions have led to compulsory closures, interspersed with periods in which operating conditions were unviable. For these organisations, the landscape is characterised by uncertainty as they navigate an increasingly unstable environment.

Given this context, it was unsurprising that participants found it difficult to identify what they wanted to gain from the process. They were convinced it was vital to engage with digital working, but couldn't maintain a strong sense of what outcomes the engagement would drive. Any product or service ideas — no matter how intelligently conceived — felt frivolous, because implementing them might move vital resources and energy away from the heart of the organisation.

It was this discomfort that ended up providing the texture for the Digital Pivot conversations. How is it possible to adopt digital technologies without compromising organisational vision and purpose, and without disturbing day-to-day / frontline operations?

In 2019, Cassie Robinson (Deputy Director, Funding Strategy at The National Lottery Community Fund) wrote a blog sharing the learning from the first round of The National Lottery Community Fund's recently launched Digital Fund.[19] She outlines various ways that the word 'digital' was interpreted by applicants. She talks about:

- Digitising process (business as usual, done in a more digital way);

- Basic digital infrastructure (upgrading digital systems including content management systems, payment and booking systems, *etc*);

- Digital skills and digital inclusion (supporting staff and customers or audiences, participants, *etc*, to use digital tools);

- Designing new digital services (new ideas that meet a need or improve a service);

- Digital engagement (social media and digital content);

- Digital innovation or tech for good (using technology to address a social need)

- Organisational redesign and transition (moving from one model to another, to make it fit for purpose).

[19] https://bit.ly/cassie-robinson-blog

She goes on to clarify the following:

*... there is something about how we do all of these things. It's important to remember that digital is not something that you do, it is something that you are. Another way you might hear people talking about 'digital' is as a mindset. This doesn't mean you are the person that does the social media for your organisation or just something that the 'digital team' does, this is a set of practices and behaviours that a whole organisation needs to adopt.*

'Digital as a mindset' is not something that has taken hold in many larger organisations.[20] As a result, digital exploration can feel like dabbling in the peripheries. Dreaming up interesting services or improving digital literacy is not ultimately satisfying or beneficial to these organisations. It may solve one element of one problem. But until the organisation broaches cultural change in order to centre digital as an organisation-wide behaviour and competency, it will always feel somewhat uncomfortable and unstrategic, as though it is distracting or distorting company vision and values.

## Digital Transformation

Instead of working on R&D or production with these organisations, Suzy suggested focussing on the Digital Transformation (DX[21]) process. DX is a journey which enables companies to understand how they might embed digital technology across the entirety of the organisation. The aim is to transform processes, structure, services, experience *etc*, making the organisation fit for the changing environment in which it operates. It is essentially 21st Century Organisational Development.

The DX journey is a long one. When done properly the process takes months. Some argue that it's an ongoing, cyclical process with no end point. It's not possible to do much practical work within a couple of hours, so instead Suzy ran an introduction to Digital Transformation session with these organisations, encouraging a cross-section of employees and board members to attend.

**Learning Points**

Digital Transformation enables organisational change. Organisations discover how to embrace and embed digital tools in order to meet the demands of a changing world, to connect more effectively with audiences and participants (customers and clients in more commercial settings). The endgame is to establish how to use digital to support innovation and change. In other words, a DX process helps you to use digital technology as an enabler rather than a driver.

This is about cultural change. It requires adaptation across all areas of the organisation. In order to thrive in the digital age, you need to embed a change process that impacts board membership, staff skills, service and product design, sales and all other areas of your operations and practices.

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[20] We do sometimes see it as an innate quality in smaller, more agile producing companies, even when there is a digital skills deficit.

[21] You might sometimes see Digital Transformation abbreviated as DT. DX and DT can be used interchangeably.

Normally this process is facilitated by a DX consultant. They will work with you to assess where your organisation sits on a scale, like the one in Figure 7 below,[21] and to agree where you would like it to move to.

You then move on to define your problems. What do you want to achieve as an organisation? Try to describe the gap between what you want to achieve and what you are currently achieving. Through the DX process you'll be identifying digital technology solutions that will help you close this gap. By doing this, you'll be working on one or more of the following areas:

➡ Efficiency — streamlining existing processes;

➡ Engagement — putting people at the heart of your processes;

➡ Information processing — identifying and using data;

➡ New models — radical business model and/or creative practice innovation.

Figure 7
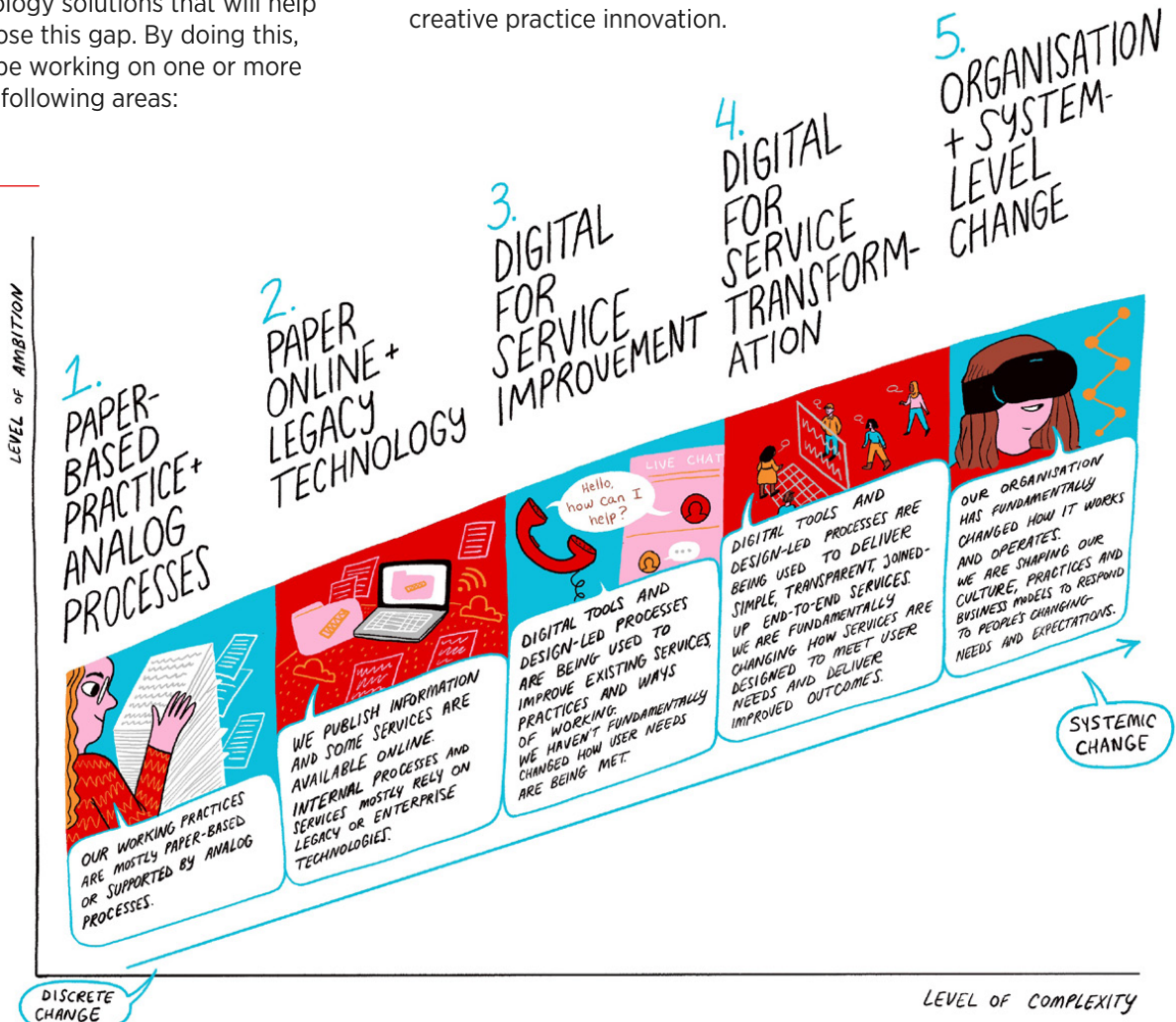


CREDIT: FUTUREGOV

Some examples of the problems and associated changes a DX process might help you to refine and flesh out include (but are definitely not limited to):

**Efficiency**

**We spend a lot of our time connecting people with information.**

You make it easier for users to find information, for instance by creating a user-friendly website, using a chatbot or developing a voice-enabled service.

▬

**We spend a lot of our time and resources powering transactional services.**

You make these available 24/7, for instance by transitioning to an online bookings service, or creating an online user-centered availability log for volunteers.

▬

**Engagement**

**Our audiences are very passive, we don't have many opportunities for active engagement with our work.**

You put people at the heart of your processes, for example by using digital tools that enable people to contribute to and affect the shape of a show, exhibition or programme.

▬

**We understand very little about the work a particular audience segment would want to engage with.**

You trial a participatory budgeting initiative, using voting technology to enable people to have some say over how elements of your budget are allocated.

▬

**Information processing**

**We spend a lot of time sifting through emails, trying to locate files, *etc*.**

You enable better collaborative working within your organisation by adopting digital products such as Slack, Notion or Trello (there are many more) to make it easier to create and share work together.

▬

**We're not using and sharing our data to contribute to and gain an understanding of our sector / place / communities.**

You contribute your data to and participate in city-wide, regional, or national projects that support aggregation of open data which people can use to create useful digital products. These are not necessarily authored within your organisation, but are perhaps beneficial to you and your wider operating landscape.

▬

**New models[23]**

**Our existing operating model is under pressure and increasingly unviable.**

You develop and move towards a peer model, which sees you using digital technology to enable people to connect with one another within the community, sharing cultural interventions with their neighbours.[24]

▬

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[23] These are the most difficult changes to achieve, because they require the organisation to challenge and radically overhaul existing operating models.

[24] A non-arts example of this is *Casserole Club*, developed by FutureGov in partnership with four local councils as a low-cost way to reduce social isolation and improve food provision among older people: **https://bit.ly/future-gov-casserole-club**

Once you have a clear understanding of problems, you move on to explore user needs. This is a vital part of the process. DX only works if you engage fully with what people actually need. You can't build a process on assumptions about what you think people might need. Consider and talk to the full range of people you engage with: artists, audiences, learners, staff, *etc*.

Expand your understanding of who they are, what they need, where they hang out, and what technology they have access to. Build ongoing research into your work cycles.[27] Digital technology is rapidly evolving, and if you're going to build digital working into the core of your organisation you need to be continually assessing whether you're using appropriate tools to meet relevant needs.

At this stage some organisations might meet digital inclusion issues. Digital Inclusion describes whether or not people have the skills, confidence, kit and connectivity to access the internet.[26] If your users are digitally excluded and this affects your ability to reach them, you will need to build ways of supporting digital adoption into your implementation plans.[27]

Alongside this work, think about the competencies you have within your organisation. How are you going to make digital working a core competency? Try to avoid creating specific digital roles or silo-ing work off into a team or someone's portfolio. Instead you want to embed responsibility for digital across the entirety of the organisation. Again, this is about cultural change — you're driving towards the creation of a digital mindset within your organisation. Whenever you're recruiting — into any role — be explicit that you're looking for people who enjoy experimentation and problem solving. People who bring an agile approach into the organisation will help with systemic change.

Think also about leadership, and whether you can use this as an opportunity to renew your leadership principles. You need to create the conditions for change, building an environment within which Agile methodologies (see page 22) can be implemented. In this context, leadership is about:

▸ Embracing and encouraging experimentation — don't flinch when processes unearth problems, re-frame failure;

▸ Adjusting budgeting approaches — you need to release funds into outcome-oriented, open-ended processes;

▸ Facilitating collaboration.

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" 

DX only works if you engage fully with what people actually need. You can't build a process on assumptions.

[25] You can use both the agile methodologies and double diamond approach described earlier in the report to support this process — p 22 and p 24.

[26] If this resonates with you then you may find it useful to look at *Digital Culture Compass' Digital Culture Charter*, designed for all cultural organisations in the UK using, or planning to use, digital content, services, experiences, data, systems or technologies as part of their work. Among other things, it lays out a high level commitment to tackling a number of digital inclusion issues:
https://bit.ly/digital-culture-charter

[27] The SCVO have published a number of Digital Inclusion How To guides here:
https://bit.ly/scvo-digital-inclusion

As all of this comes together you begin to build a strategy and roadmap. This is where you design and map the digital projects and sub-projects that will enable your organisation to solve the problems and close the gaps you identified at the start of the process.

To return to where this section started: the Digital Transformation process will only work if digital is the enabler and not the driver. Begin the process as a technology agnostic organisation. If you avoid setting assumptions early in the process you're less likely to disenfranchise people within the organisation. You're also less likely to sideline digital, configuring it as a distraction, or bolt digital tools onto an existing and possibly fragile system.

If you focus too quickly on what different technologies can do — including dwelling on who else is using what, and what they're achieving — you'll find that you fetishise these technologies.

This in turn creates a semi-obsessive propulsion towards adoption, rather than an intentional and strategic drive towards embedding digital technology within the organisation. If you have ever found yourself thinking something along the lines of 'we definitely need an app, people have apps these days,' you're falling into this trap.[28]

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> " The Digital Transformation process will only work if digital is the enabler and not the driver.

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[28] On this point, the evidence firmly suggests you don't need an app: https://bit.ly/colleen-dilen-apps

# Case study / North Edinburgh Arts

North Edinburgh Arts (NEA) is a purpose built cultural centre offering local residents a place to relax, explore, learn, meet, volunteer and have fun. The organisation is a trusted community anchor for Muirhouse, West Pilton and the surrounding neighbourhoods.

As well as being the creative hub for the area it is a centre for social exchange, tackling social isolation and acting as an informal, welcoming one-stop-shop for community support.

In non-Covid times, NEA offers over 30 hours of creative activities each week, most with a family focus, alongside a wide range of other events such as exhibitions, dance shows, circus skills workshops, community theatre, poetry readings and film clubs.

The award-winning centre opened in 2002. NEA's aim is to provide a safe, enjoyable and creative environment for people of all ages to relax and develop within.

NEA came into the digital pivot process with a complex set of challenges. The organisation primarily engages with members of the local community via its building. The pandemic had created an existential as well as a logistical crisis. What does it mean to connect with people when the core provision you offer can no longer be made available?

This was crystallised by the fact that many members of the local community experience digital exclusion in one or more forms. Within Muirhouse (the area of Edinburgh where NEA is based) some families are unable to access devices and/or don't have a broadband connection. There are also a significant number of residents aged over 60, an age bracket which tends to lack digital skills and literacy. As Citizens Advice Scotland point out on page 11 of their report titled *Disconnected — Understanding digital inclusion and improving access* (2018):

> *…in accordance with the survey findings on respondents' ability to use a computer, internet use appears to be linked with age. For example, survey findings indicate that four out of five respondents in the 18 to 24 age group used the internet often (82%), compared to only one in every four respondents (25%) aged between 65 and 79 years.*[29]

When we began our conversations, NEA had already converted the building into an emergency response centre. Among other activities, they were giving out hundreds of free meals to residents in need. They were delivering some art activities via Zoom and Facebook Live. To a greater extent, the short-term pivot had happened.

We talked a bit about designing some smart online products and services that the organisation might be able to deliver while Covid-19 remained in circulation, but we weren't convinced that impact would be sufficiently great to warrant the effort that would need to go into design and delivery. In other words, this would be a piecemeal approach that ran the risk of solving temporary problems rather than the more chronic, pervasive issues that NEA engages with through its work.

We decided to focus on a medium to long term horizon. We looked at two key issues — the persistent problem of digital exclusion as described above, and NEA's capital plans. The organisation plans to extend its physical footprint via the acquisition of neighbouring space. They have built some digital thinking into their planning, for example they talk about building a digital hub within the new complex which will feature a makerspace offering access to high quality technology. This is motivated by a need to provide skills and career pipeline opportunities to local residents rather than core organisational drivers.

[29] https://bit.ly/cas-disconnected

Both digital inclusion work and the capital project will offer opportunities for NEA to develop the ways in which they engage with local communities. The latter is a major initiative that will inevitably require adjustments within organisational culture. We discussed using this change moment to embed a digital transformation process. The capital process also opens space to think about Digital Placemaking — thinking about how we can use digital technology to enhance and deepen relationships between people and places. The better examples are generally co-designed by communities, and use creative solutions to improve or enhance public experiences of place.[30]

Suzy ran an Introduction to Digital Transformation workshop with a board member, a senior management team member, and a core staff member. We talked through the principles of DX, what a process looks like, and what the organisation might gain from embedding a digital mindset at its heart.

NEA continue to concentrate on navigating the waves of this pandemic. At the point of writing, they are reopening the building for the first time in months. As we move on through 2021 and life (hopefully) starts to stabilise, the organisation will find it has more capacity to introduce some of the longer term, change-oriented processes that the digital pivot process has started to seed.

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[30]   Bristol & Bath Creative R&D are currently running a pathfinder exploring Digital Placemaking as part of a wider programme connecting the worlds of university research and creative business to develop a shared vision for tomorrow's creative industries. You can read more about the initiative — including several interesting prototypes — here:
https://bit.ly/bristol-bath-creative-digital-placemaking

# What next?

As outlined in this report, there are many reasons that motivate people to engage with digital working: perhaps you're interested in pushing at the edges of your existing practice, maybe you want to find ways of engaging differently with (different) people, or maybe you know your work would benefit from the efficiencies that can result from introducing digital tools.

As we move further into the 21st Century, the need to work with digital technologies and materials will continue to increase. Digital tools won't replace live, in-person experience, but they will continue to multiply, evolve and change the ways in which we engage and communicate ideas with one another.

Within this report, we have highlighted a handful of the barriers that appear to have prevented some of those taking part in the Digital Pivot process from building digital technologies into their creative practices and their work more widely. We have tried to make suggestions to help any of you experiencing anything similar to move beyond these barriers. We've also highlighted the opportunities that people have identified, as well as particular characteristics that seem to support the adoption of digital technology.

Section 1 explores some of the anxieties people experience when moving towards new ways of working, and attempts to unpack the mythologies surrounding 'digital'. It moves on to address the working relationships you will need to build in order to create digital work, and some of the ways you can do this.

The second section focusses on methodologies. It underlines how important it is to understand who you want to engage with, and what kind of relationship they have with digital tools and platforms. It describes how you can use the Double Diamond to centre the user within the process. It also highlights that digital technologies can introduce more variables and uncertainties into play, describing how Agile project management can help to deal with this by creating space to build risk-taking and testing into the production process.

The final section looks at the risk of piecemeal digital adoption, exploring the discomfort and problems this can cause. It recommends that organisations think about going through a digital transformation process to achieve the more holistic, authentic and culturally appropriate adoption. It positions DX as organisational development that is fit for the 21st Century.

Over time, we're likely to see humans interfacing with digital technology in new ways. The fourth industrial revolution (discussed in the **Introduction**) foregrounds data, robotics and AI as driving change, responsible for disrupting and challenging the models we developed throughout the 20th Century. But what of human purpose and meaning?

We are beginning to see a new framing emerge, reflecting the work people are doing to articulate ways in which humans and technology might work together to problem solve and reimagine the social fabric of society. Some call this a fifth industrial revolution, while others are more interested in positioning this as a social revolution.[31] Either which way, it's positioned as a fundamental shift in the ways we gather and connect in order to address the very sharp social, ecological, economic and — yes — technological challenges of our time.

The cultural and creative sectors have the opportunity to play a critical role as we explore the potential and actual impacts of this paradigm shift. Humanity, purpose, and inclusivity are touchstones within these sectors, obviously so are creativity and imagination. This is a powerful mix of ingredients. What's missing, perhaps, is the expertise, skill and confidence that will allow artists, designers, other creative practitioners — plus the organisations that host and support them — to walk confidently towards taking on this role.

**Figure 8**

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[31] You can read more about the fifth industrial revolution and how it maps against a potential social revolution in Hilary Cottam's seminal report Welfare 5·0: Why we need a social revolution and how to make it happen: **https://bit.ly/ucl-hilary-cottam**

To ensure continuing relevance and therefore survival, it's vital that we start working with people who get digital. These people need to be embedded across the entirety of our creative and operational ecosystems. They understand the changing landscape. They understand what it means in terms of business model and organisational culture. Crucially, they also understand the social and emotional impacts.

They are able to embed iterative, agile, prototype-oriented processes into the environment. We urgently need this if we're going to embrace and find solutions to the many complex and disruptive challenges we're facing.

Fortuitously, the more we work with these people, the more we will notice we're taking on these characteristics. People do not intrinsically 'get digital'. It's something that is learnt and practiced through ongoing interaction and implementation.

Digital practice is no longer about edge culture: it must not be left sitting over there in an innovation box that someone else is responsible for. It's not something we can fetishise, and then dismiss. Digital technology can no longer be viewed as that confusing thing that the IT or marketing team look after. Our world is driven by data and algorithms. Being digital means being able to negotiate this. It's a mindset and a culture, not just a set of skills. The people who understand digital will accompany you on your travels, navigating appropriately and wisely towards the turbulence of the future.

Over the past couple of decades, there has been significant focus on the opportunity digital technology brings to monetise creative content and practice. You may have noticed that we don't directly broach this at any point in this report. This is a conscious decision, reflecting our belief that a call to action that focuses on prioritising financial gain does little to encourage people to embark on the journeys that will result in the progress the sector needs to make.

That said, value is an implicit part of the conversation throughout. Ultimately this is a discussion about credibility and relevance: we don't suggest you engage with digital technology because you want to make money, we suggest you engage with it because you want to survive. Ultimately, we're asking you to think about competence, about being fit for purpose as we attempt to surf the crashing waves of the 21$^{st}$ Century.

## Thanks and credits

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People do not intrinsically 'get digital'. It's something that is learnt and practiced through ongoing interaction and implementation.

# Appendix 1 / Digital Pivot participants

| | |
|---|---|
| Alice Cooper | Edinburgh |
| Birds of Paradise Theatre Company | Glasgow |
| Dumfries and Galloway Arts Festival | Dumfries & Galloway |
| GAMIS (Glasgow Artists Moving Image Studio) | Glasgow |
| Hanna Tuulikki | Glasgow |
| Karen Herbison | Paisley |
| Magdalena Schamberger | Edinburgh |
| Naomi O Kelly | Glasgow |
| North Edinburgh Arts | Edinburgh |
| North Lands Creative | Caithness |
| North Light Arts | East Lothian |
| Panel | Glasgow |
| Right Lines Productions | Easter Ross |
| Ruxandra Cantir and Sarah Rose Graber | Glasgow |
| Scottish Book Trust | Edinburgh |
| SEALL (Skye Events for All) | Skye |
| Strange Town | Edinburgh |
| Take Me Somewhere | Glasgow |
| The Good Life Group | West Dunbartonshire |
| The Village Storytelling Centre | Glasgow |
| Tony Mills | Edinburgh |
| Visible Fictions | Glasgow |

# Appendix 2 / Biographies

## Suzy Glass
### Author

Suzy Glass is an independent producer, facilitator and consultant. She works in interdisciplinary settings with particular interests in cultural practice, emerging futures and transformational change. She is based in Scotland and works internationally. She specialises in cultural production, strategic development and organisational development. She has strengths in horizon scanning and synthesis, and is comfortable working in complex environments.

Clients include the Barbican, Creative Scotland, Edinburgh Futures Institute at the University of Edinburgh and the National Lottery Community Fund. At the time of writing, current projects include workshopping Covid-19 emergence and renewal strategies, delivering the second round of Creative Scotland's *Digital Pivot* consultancy programme, and working with a major cultural organisation to engage communities in a durational co-design exercise.

In 2020, Suzy designed and delivered workshops and talks with and for clients including the Collective Leadership team at Scottish Government, *International Futures Forum*, *Young Scot, Edinburgh International Cultural Summit*. Topics included Future Gazing, 21st Century Methodologies, and Working with Complexity

In the past she has been involved in initiating, developing and implementing a number of national strategic programmes. These include *Sync*, Scotland's internationally acclaimed digital innovation programme, and *Sited+*, a research programme addressing the civic and potential impact of sited work in Scotland. She was also part of the Learning Team for the Nesta / ACE *Digital R&D Fund for the Arts*.

Suzy began her career in funding, working in the Combined Arts team at London Arts and then at Arts Council England as a Capital Officer. She was shortlisted for a 2016 Arts Foundation Fellowship. She is the proud mother of two small people.

**www.suzyglass.co.uk**

## Ashley Smith-Hammond
### Editor

Ashley is an Officer within the Creative Industries team at Creative Scotland, specialising in digital.

An expat based in Glasgow, she came to Scotland in 2003 and undertook a PhD focused on post-devolution Scottish cultural policy, identity and professional dance practice. She worked for nine year for Culture Republic, Scotland's audience engagement agency, with artists, producers and cultural organisations across Scotland, helping them understand who their audiences are, who they could be and how to reach them.

Ashley's specialism at Culture Republic was digital engagement. As part of the role, she project managed the £3 m *AmbITion Scotland* programme, a digital development programme for Scotland's arts and cultural sector. It helped organisations achieve 21st Century sustainability goals through implementing integrated IT and digital developments.

## Rydo
### Designer

Rydo is a Glasgow-based graphic design studio specialising in brand strategy & company positioning, visual identity development and communication design. Established in 2009, the studio strives to create work that is succinct and engaging, driven by an enthusiasm for design that communicates clearly and is underpinned by a rigorous conceptual approach.

Working with Rydo is based on a candid, open, collaborative process with equal appreciation afforded to the pragmatic (the method) and the intuitive (the magic). Director Ryan Thompson is a long-term member of the International Society of Typography Designers (ISTD), serving as an assessor for the European and North American student assessment scheme, and is a firm believer in the potential that meaningful design possesses as a catalyst for progress.

The studio works for — and with —artists & producers, performers, photographers & film makers, designers, illustrators, crafts people, researchers & educators, musicians & record labels, fitness fanatics, writers & dreamers, programmers, engineers, scientists, technologists, entrepreneurs and connoisseurs.

**www.rydo.co.uk**

## Maria Stoian
### Illustrator

Maria is an illustrator and comics artist based in Edinburgh, where she also teaches at the Edinburgh College of Art. She cares about feminism, the state of the world, and making things look nice. She regularly contributes non-fiction comics for *The Nib*.

Her work has appeared in anthologies such as *We Shall Fight Until We Win* and the Eisner-winning *Drawing Power*. She's always looking for new potential collaborations for comics as well as illustration work, be it editorial or commercial. She collaborates on ceramic pieces with artist Natalie J Wood.

**www.mariastoian.com**

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# Appendix 3 / Resources

Instead of listing a series of resources that will quickly date, we are building a **Digital Pivot reference library**.[32] You can access it whenever you wish, and we will continue updating it for at least six months from the date of publication.

This database is built in Notion, which is a networked workspace that allows you to publish to the internet. If you have a Notion account, you will be able to add comments to entries.

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