

Institution: University of Leicester		
Unit of Assessment: 34		
Title of case study: Building the digital confidence and skills of international museum workforces through policy and practice		
Period when the underpinning research was undertaken: 2017–Present		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Professor Ross Parry Dr Sophie Frost	Role(s) (e.g. job title): Professor of Museum Technology Digital Fellow	Period(s) employed by submitting HEI: September 1998–Present January 2018–November 2020
Period when the claimed impact occurred: September 2017–November 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact <p>The 'One by One' (ObO) research initiative builds digitally confident museums. The multi-partnership consortium of cultural organisations, policy makers, professional bodies and academics, has helped museums use and understand digital technology in a purposeful way. Impacting both policy and practice internationally, ObO has:</p> <ul style="list-style-type: none"> • influenced cultural policy by informing the development of national industry standards; • advanced digital leadership in museums through the creation of a new literacy framework for the workforce; • established an international community focused on museum digital skills; • guided the museum sector towards the significance of emotion and empathy in its digital work. 		
2. Underpinning research <p>In 2007, Parry's monograph <i>Recoding the Museum</i> [R1] argued that 'digital' has changed the idiom of 'museum' - disrupting and renegotiating long-standing orthodoxies in collecting, curatorship and audience engagement. The subsequent volume <i>Museums in a Digital Age</i> [R2] helped establish this emergent subject area. At the centre of this new historicised and theorised framing, was Parry's concept of the 'postdigital museum' [R3] - a way of thinking about museums in which digital is managed normatively, innate within a range of institutional operations and definitions.</p> <p>Essential to the idea of the 'postdigital museum' was the issue of staff digital skills and the role they play in the adoption of technology more widely within the sector [R4]. Consequently, following a decade of developing the theory and practice in this area, Parry was awarded GBP500,000 by the AHRC (as PI) for 'One by One' (ObO), a multi-partner project with Arts Council England, The National Lottery Heritage Fund, UK Museums Association and 15 other national partners, leveraging interdisciplinary scholarship to understand how to deliver a transformative digital skills framework for the UK museum workforce.</p> <p>The project mapped the demand for new forms of digital skills, and the ways they are supplied, developed and deployed in the UK museum sector [R5]. This work evidenced that, rather than an orthodox 'curriculum' and top-down set of core skills, the museum sector needed instead</p>		

a context-based and person-centred (bottom-up) approach, by which each institution and each employee could identify their own pathway to digital maturity [R6].

Building on these foundations, a campaign of year-long, action-research interventions at museums across the UK, led by a network of post-doctoral 'Digital Fellows', animated alternative approaches to building institutional digital confidence.

This research demonstrated the value of a more nuanced model of 'digital' for museums - one that differentiates between:

- the *use* of digital (tools and technology);
- the *management* of digital (processes and strategy);
- the *creation* of digital (production and collections); and
- the *understanding* of digital (culture and values).

It also evidenced the effectiveness of a holistic ('whole organisation') approach, constructing a multi-dimensional framework for building digital confidence in museums, with:

- 'visioning' *prioritising* digital;
- 'leadership' *activating* digital;
- 'business processes' *enabling* digital;
- 'institutional culture' *supporting* digital; and
- 'people' *driving* digital [R7].

In 2020 the ObO consortium was awarded a further GBP100,000 for its '2by2' project, as part of the AHRC's 'UK-US Collaboration for Digital Scholarship in Cultural Institutions' programme, extending its relationship with the American Alliance of Museums and the Smithsonian Institution. By its completion (November 2020), '2by2' evidenced how 'digital leadership': 1) needs to acknowledge the importance of empathy and equity within its practice; and 2) needs recalibration within a sector context of individual and institutional precarity [R8].

Responding to these needs, by modelling new forms of digital leadership in museums, ObO has extended further its research in its most recent '3by3' project (2021–2022), funded jointly by the AHRC (in the UK) and the National Endowment for the Arts (in the US).

3. References to the research

[R1] Ross Parry, *Recoding the Museum: Digital Heritage and the Technologies of Change* (Routledge: London and New York, 2007).

[R2] Ross Parry, 'The End of the Beginning: Normativity in the Postdigital Museum', *Museum Worlds*, vol. 1 (2013), 24-39.

[R3] Ross Parry (ed.), *Museums in a Digital Age* (Routledge: London and New York, 2010).

[R4] Carolyn Royston and Ross Parry, 'Building a framework: The museum sector needs to rethink digital skills - from the ground up', *Museum* (2019), vol. 98, issue 1, 34-39.

[R5] Sally-Anne Barnes, Erika Kispeter, Doris Eikhof and Ross Parry, *Mapping the Museum Digital Skills Ecosystem*. Phase One report, One by One (Leicester: University of Leicester, 2018). <https://doi.org/10.29311/2018.01>

[R6] Sejul Malde, Anra Kennedy and Ross Parry, *Understanding the Digital Skills & Literacies of UK Museum People*. Phase Two Report, One by One (Leicester: University of Leicester, 2019). <https://doi.org/10.29311/2018.02>

[R7] Ross Parry, Sophie Frost, Yoti Goudas, Marco Mason, Lauren Vargas, Karin de Wild, *Building Digital Confidence through a Holistic, Contextual and Purposeful Approach in UK Museums*. Phase Five Report, One by One (Leicester: University of Leicester, 2020). November 2020.

[R8] Sophie Frost, *People. Change. Museums*. Podcast. Episodes 1-6 (University of Leicester, 2020).

4. Details of the impact

Influencing cultural policy by informing the development of national and international industry standards.

ObO research directly informed the delivery of the UK government's *Digital Culture Compass* (DCC) **[E1a]** launched February 2020, comprising a 'Tracker' and 'Digital Charter'. The 'Charter' co-authored by ObO, with Arts Council England (ACE), Culture24, The Audience Agency, Heritage Lottery Fund and The Space, sets out guiding principles for digital projects across the UK culture sector. Senior Manager for Enterprise and Innovation at ACE, states that ObO's involvement "*added academic rigour and credibility*" to the outcome of the DCC, with the "*key principles of One by One [...] mirrored in the key principles of the Charter and fundamental to it*" **[E1b]**.

Signalling ObO's national importance, all research activity delivered through the GBP15,000,000 'Discovery Projects Call' of UKRI/AHRC's 'Towards a National Collection' initiative, have been required to align to the principles set out in the 'Charter' as they build a unified virtual 'national collection'. Insights from ObO have also informed the development of the 'Digital Tracker' - a freely available online maturity tool enabling organisations across the UK to assess their approach to digital technology. Since its launch, 14,500 users have accessed the online DCC resource, 413 users have registered, and 190 Tracker reports have been created **[E2]**.

Advancing digital leadership in museums through the creation of a new literacy framework for the workforce.

Since 2017, ObO has established a set of 'framings' for digital literacy: definitions, tools, resources and insights, which have been adopted by sector support bodies and museum professionals to build digital leadership and skills.

The Partnerships Director of Culture24, an ACE-funded Sector Support programme, describes ObO's 'framings' "*as the cornerstone of our approach to building digital confidence and understanding,*" which "*strengthen [the] sense of a connected, relevant foundation to our digital leadership and skills-building work*". Culture24 hosts the 'Digital Pathways' resource bank, which houses sector-facing resources from ObO, as well as from other creators. As the Partnership Director notes, "*the website has received close to 20,000 page views from 5,078 users to date ... One by One resources are in the top 10 most-viewed resources, forming the backbone of the site's content*" **[E3a]**. ObO resources provide the core language and approach for Culture24's national operations around digital change, including 'Leading the Sector', a nine-month executive-facing Digital Leadership programme funded by the National Lottery Heritage Fund. The first cohort of 16 leaders drawn from across the sector, including National Museums Northern Ireland, National Museums Scotland, The Royal Society for the Protection of Birds, the National Archives and the Wildlife Trusts Wales, have completed the training **[E3b]**.

ObO's national museum partners (including Science Museum Group, National Museums Scotland, the V&A and National Museum Wales) have also adopted the 'framings' of ObO to advance digital literacy in their specific contexts. Director of Collections at National Museums Scotland, states that "One by One has enabled us as a national museum group to think holistically about the place of digital within our strategic vision, our people and our working culture" [E4]. The Digital Director of the Science Museums Group (comprising Science Museum, London; National Science and Media Museum, Bradford, Science and Industry Museum, Manchester; National Railway Museum, York and Locomotion, Shildon and receiving 11 million online visitors in 2019-20), states that One by One has "contributed to the advancement of digital leadership in our museums by giving...focus to consider the complex landscape of digital activity within the museum sector" [E5].

Establishing an international community focused on museum digital skills.

ObO has developed a network of national and international partners representing the diversity of digital practice in the museum sector, including the UK's Collections Trust whose collections management standard is used by all 1,700 accredited museums in the UK. They have recognised ObO's pivotal role in helping address the longstanding infrastructure needs of UK museums. The Chief Executive highlighted that *"Most aspects of collection management – from back-office tasks to creating collections-based content – require increasing levels of digital literacy and leadership within museums and collaborative networks, so [OBO] aims and approach were a good fit with our own. In order to move our work forward, we need museums to have a clear, confident sense of how to use digital technologies well"* [E6].

ObO has given institutions such as the Science Museum Group what they consider a 'forum for consideration' - leading to an understanding that *"Whilst all museums are at a different place in their digital journey, many of the challenges and opportunities are shared, and there is much to be learned from colleagues across the sector"* [E5].

The Museums Association, a body representing over 14,000 professionals, points to the important role that the research has played: "Overall, One by One has had a huge impact on addressing a real need in the sector – the need to improve people's digital confidence and skills in a way that is relevant and useful to them. It has led to fruitful collaborations across the sector, including internationally, in an area where working together and sharing ideas and new practices is vital" [E10].

Building on its UK consortia (2017-2020), ObO's new US collaborations (2020 onwards) work asynchronously within the 'Digital Commons'—established as part of the project—which provides an online community for previous and current participants of 'One by One' projects to communicate with each other and to share good practice. The Digital Commons consists of public and private, resources and agreements for designing and managing co-operative ways of delivering digital activities. Within the Digital Commons, participants discuss how digital is understood, managed, used and created across leadership, culture, visioning, people, and processes. Stakeholders in the US from the American Alliance of Museums and the Museums Computer Network have endorsed this environment as *"a ground-breaking virtual community"* [E7] in which *"discussions around new ideas and issues that [we] face as agents of change in their respective institutions or organizations"* can take place [E8].

Guiding the museum sector towards the significance of emotion and empathy in its digital work.

Through its shareable resources, conceptual models, and research interventions, ObO has helped museums to centre emotion and empathy in their digital work. The Senior Digital Program Officer at the Smithsonian Institution, has described how ObO's 'framings' have enabled the Smithsonian *"to confront and understand the emotional labour digital leaders face in simultaneously advocating for, leading, and coordinating ambitious digital goals"* [E9].

At a sector level, partners such as the UK Museums Association have emphasised the import of ObO in realising the role of emotion and empathy in digital work [E10]. Through its podcasts, open workshops, and contributions to high-profile professional events (with the Museum Computer Network (US), Museums Association (UK) and British Council/ International Council of Museums UK) ObO has, according to the Smithsonian, *"emerged as a leader [...] to guide the museum sector towards a new focus on the role of emotion and empathy in digital work in museums"* [E9].

5. Sources to corroborate the impact

[E1] Digital Compass.

(a) <https://digitalculturecompass.org.uk/>

(b) Testimonial: Senior Manager, Enterprise and Innovation, Arts Council England (ACE) (UK).

[E2] Testimonial: Chief Operating Officer, The Space (UK).

[E3] Culture24.

(a) Testimonial: Content and Partnerships Director, Culture24 (UK).

(b) <https://weareculture24.org.uk/leading-the-sector/>

[E4] Testimonial: Head of Collections, National Museums Scotland (UK).

[E5] Testimonial: Digital Director, Science Museum Group (UK).

[E6] Testimonial: Chief Executive, Collections Trust (UK).

[E7] Testimonial: Senior Director Leadership Programs and Special Events, American Alliance of Museums (USA).

[E8] Testimonial: Executive Director, Museum Computer Network (USA).

[E9] Testimonial: Senior Digital Program Officer, Smithsonian Institution (USA).

[E10] Testimonial: Head of Publications and Events, Museums Association (UK).