



Digital R&D Fund  
for the Arts

# THE IMPERIAL WAR MUSEUM'S SOCIAL INTERPRETATION PROJECT

January 2013

University of  
**Salford**  
MANCHESTER

MTM LONDON  
REASON | IMAGINATION | IMPACT



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## Executive summary

### Introduction

- This report represents the output from research undertaken by University of Salford and MTM London as part of the joint Digital R&D Fund for Arts and Culture, operated by Nesta, Arts Council England and the AHRC. University of Salford and MTM London received funding from the programme to act as researchers on the Social Interpretation (SI) project, which was led by the Imperial War Museum (IWM) and their technical partners, The Centre for Digital Humanities, University College London, Knowledge Integration, and Gooii. The project was carried out between October 2011 and October 2012.
- The aim of the project was to apply social media models, to provide new frameworks for audience engagement and social interpretation. The aspiration was to create a service that encouraged people to respond to IWM's themes and collections through several forms of digital interaction and participation both in the gallery and via mobile and online platforms.
- Specifically, the SI project explored whether applying social media models to cultural collections has the potential to increase audience engagement and reach, and whether social moderation is an effective response to the challenges posed by representing public comment and discussions in physical and digital cultural spaces.
- To enable this digital interaction and participation IWM and its technical partners developed and installed 'comment and information' kiosks, placed QR codes next to exhibits and artworks, developed a bespoke mobile application called 'IWM Scan and Share' and added social interpretation elements to its website.
- Our research was undertaken at both IWM London and IWM North, before and after the installation of the SI technology, and both quantitative and qualitative data was collected and analysed at both sites.
- Methods used included on-site visitor walking interviews, visitor focus groups, a visitor survey, staff interviews, and content and textual analysis of the visitor comments and the technology interfaces.
- The purpose of our research was to investigate the potential for, and risks in applying social media models to cultural collections; to facilitate social interpretation, to increase audience engagement and reach, and to re-balance the audience/authority relationship.

### Research Context

- The most recent data from the Department of Culture, Media and Sport (DCMS) indicates that between 2005/06 and July 2011 to June 2012, the proportion of people who had visited a museum or gallery in the last year had significantly increased from 42.3 per cent to 51.3 per cent. However, importantly, it was people in higher ACORN groups who had the highest attendance rates in the last year, with those categorised as Wealthy Achievers (58.5 per cent) and Urban Prosperity (67.6 per cent) attending considerably more than the Hard-pressed (36.7 per cent).
- A solution to this, it is suggested, is to bring the arts into people's everyday lives, public spaces, local communities, and find new ways to develop a greater sense of public ownership of the arts, indeed to make the arts more relevant (McMaster, 2008). The SI project speaks to these contemporary debates regarding the need to engage people in arts attendance, particularly where social status may militate against this. By drawing on social media models that encourage participation, the IWM's aim was to use the SI project to try and 'speak' to diverse audiences and to extend its reach into the everyday lives of its audience. The intention has been to make collections more relevant, accessible and democratic, thus allowing the audience to feel more engaged and to have a greater sense of ownership, connection and participation.
- The rise of 'Web 2.0' technologies and 'new' social media incorporate a common discourse of a 'participatory turn' and new forms of 'interactivity'. Social media is seen as a promising mechanism for engaging a wider audience. If we focus upon the potentials of social media for the SI project, then it is clear that such arrangements can expand patterns of engagement,

through: defining one's tastes; individual and group identities and leisure; play and creative practice.

- However, whether digital technology and social media, such as that employed in the SI project, with its in-gallery, online and mobile applications does actually encourage and enable the audience to engage with the museum in different ways, or indeed extend the reach of the Museum, requires further investigation.
- The 'risky' nature of many of the artefacts and exhibitions that the IWM offers to its audiences is a key consideration in this context (and arguably certain other museums and other arts and cultural organisations). Yet risk, as conceptualised in studies of museums, often translates into the risks associated with the maintenance of the environment of objects in order that they do not deteriorate. Our work suggests a broader ranging set of issues need to be considered under the banner of 'risk' in contemporary arts and cultural contexts.
- Further, although there has been a flood of projects using new media forms to voice the stories and interpretations of members of the public, it is argued that these projects do little to enable the participants to have control, become the voice of authority, or challenge the 'top-down' role of the museum
- The SI project provides an opportunity to develop an understanding of how social media is used within a museum context and the power structures implicated in this. And, indeed, whether the use of social interpretation de-stabilises the authority of the museum and democratises knowledge, and in so doing whether it devalues and undermines the museum's role as an educator, and as a site of formal learning and cultural capital.

### **Existing Use of Social Media by IWM Visitors**

- Key to the rationale for the SI project was the huge increase in the social media use over the past five years, and the perceived potential for adopting these behaviours to facilitate sharing and reinterpretation of cultural objects.
- Most visitors were Facebook users, although usage varied significantly, with older visitors (for example) more likely simply to have a presence on the site without actively using it; the visitor survey found that 51 per cent of visitors in IWM North and 62 per cent in IWM London used Facebook; Twitter at 20 per cent and 17 per cent; Foursquare at 4 per cent and 3 per cent.
- Few IWM visitors reported using social media as a means of engaging with arts and cultural content or institutions and, for those that did, this was often within the context of social sharing, for example through recommending events to friends or commenting on other people's accounts.

### **Usage of Social Media Models**

- For a minority of visitors, there is a demand to capture and share cultural objects and experiences, and SI therefore has the potential to complement their existing behaviours. However, it should be noted that this sort of activity was relatively infrequent, and was viewed by most participants as equivalent to other sorts of sharing, socialising and interaction via social media, rather than being as a behaviour especially reserved for museums and other cultural contexts.
- Through the walking interviews and reviewing usage of the app, website and comment kiosks, we assessed as far as possible how the SI technology fitted into users' existing social network activity. We found that, while SI did appear to tap into a variety of existing behaviours, in some places the service conflicted with rather than complemented social media usage.
- Levels of interaction with the SI technology varied for the different elements of the service. Awareness and usage of the comment kiosks in the galleries was significantly higher than awareness and usage of the QR codes, app and web site.
- A much greater proportion of visitors engaged passively with the technology (by reading information or comments) than contributed actively (by making or responding to a comment, or collecting and sharing objects through the app and website). This reflects general patterns of

participation commonly observed in online user communities, but usage was also limited by a number of executional factors, not least of which was the preponderance of banal or childish comments left on kiosks.

- The types of comments made via the kiosks varied considerably. These included those which could be seen as involving: a degree of social interpretation (categorised as SI evident) – such as answering a prompt question, offering an interpretation of an object in question or asking a question of the museum; and those involving spam and trolling (categorised as unhelpful). It was also difficult to discern the nature of certain comments (classified as intention unclear). Forty-three per cent of comments could be seen as SI Evident, 19 per cent as Intention Unclear and 38 per cent as Unhelpful.
- Barriers to the usage of kiosks included: lack of visitor time or interest; a perception by older visitors of them being provided for younger visitors; a lack of perceived clarity regarding the purpose of the kiosks; a reported complexity of the kiosk interface and the fact that most comments were perceived as banal and childish.
- While the comment kiosks in the galleries generated a degree of interest and usage, at least amongst certain audiences, interest in the QR codes and app was negligible. However, it is important to note that the app launched at a relatively late stage of the project, and has therefore had limited time to gain awareness.
- Barriers to the adoption of the QR codes feature included: a lack of code visibility within the gallery; visitors lacking the technology to use the QR codes when identified; technical challenges such as poor telecommunications signal/perceived lack of wifi access; a lack of interest in the objects that had QR codes associated with them and a perception that the app was too complicated.

### **Engagement and Connectedness via Social Media Models**

- There is some evidence that the SI technology did increase levels of engagement. Observation of behaviour in the galleries, and interviews with staff members, points to a degree of ‘buzz’ and social interaction amongst visitors as they discover and interact with the comment kiosks, although this seems to be limited primarily to children and some young adults. For a majority of visitors the option to comment or see what others have written is not in itself appealing and, for some, the presence of a screen in itself is unlikely to prompt further exploration.
- Some users of the web site had chosen to create sets of their favourite objects, as well as leave comments, suggesting a higher degree of engagement with the museum and its collections. However it is not clear what this engagement entails when we refer to the collection of objects; none had provided a narrative which might explain why they had made the sets. Further work to understand such user-led curation is required.
- Our research sought to understand what motivated visitors to engage, and whether it increased their sense of connectedness to the museum, the objects in it, or other visitors. There is evidence that, in places, the technology did achieve this goal. However, the research also suggests that museum audiences have profoundly mixed views about the desirability of engaging with fellow visitors, particularly given concerns about the quality of comments throughout.
- Overall, most visitors appear to be positive or neutral about the implementation of the SI technology. There is evidence that, in some cases, it has increased people’s enjoyment of the museum, and perhaps made them more willing to recommend it or consider returning themselves.

### **Challenges and Risks of Social Interpretation with Social Media Models**

- From the outset of the project a major concern of the project team was that the reputation of IWM could be harmed if the engagement of visitors was not managed appropriately.
- Most participants seemed generally unconcerned about risk and were happy for all the comments to remain, although there was recognition that filtering would improve the experience. Furthermore, some participants actively defended the right of visitors to write what they wanted, feeling that this was part of the whole point of the exercise. Only a small minority believed that comments should be actively curated by museum staff.

- However, the evidence suggests that one of the key problems with the project (hence, an unforeseen type of risk) has turned out to be a perceived lack of substance in comments made by visitors and the negative effect this could have on visitors' experiences.
- It is clear from the number of reported comments that a good proportion of visitors were happy to engage in processes of moderation, and this potentially reflects the norms of social media familiar to the younger visitors who were the most frequent users of the kiosks.

### **The Audience/Authority Relationship**

- The findings from our qualitative data suggest that the majority of IWM visitors had limited interest in participating in content creation, that the existing comments were not sufficiently relevant to be able to transform or re-balance their relationship with the Museum, and that only a minority expressed a desire to change that relationship anyway. Most visitors and focus group respondents were content, at ease, and accepting of the Museum acting as the voice of authority.
- There is some appetite for other interpretations or voices to be heard in the museum, but the existing presentation of the comments through the SI comment kiosks and app did not enable this to happen in a way that either satisfied the visitors, or enabled any real challenge to the authority of the Museum.
- It is difficult to report on whether there is a democratisation of knowledge through social interpretation because so few of the respondents commented, or read the comments of other visitors. There is certainly some sharing of information and opinion occurring, at least.
- There was some acknowledgement that being able to share your knowledge, or express your point of view, may be beneficial or even therapeutic for some individuals. A few respondents at both locations recognised that social interpretation did allow people to see the emotional impact an object might have had on an individual, however they were less convinced that this added to our knowledge or understanding of the exhibit or object, or whether this was the best way to comprehend the emotional impact.
- Visitors were especially open to hearing and reading other voices in the museum, if these voices had some 'authority' of their own: conferred by having expertise, specialist knowledge, or experience worthy of respect. These voices were given particular weight if they enabled the visitor to learn or feel more about the object.
- The use of 'experts' to provide commentary on the objects was seen as a useful way to add other voices, and make other interpretations available to visitors. The value attributed to interpretations by people who had 'first-hand' knowledge or experience of an object, its context or usage, was significant. A minority of our respondents wanted these 'first-hand' interpretations to be given the same, or almost the same importance as the voice of the museum.
- For some visitors there is a desire to engage in a dialogue with the museum, as a means to obtain information and knowledge above and beyond that which is on display. However, it was also evident that these conversations do not necessarily, or even preferably, have to be mediated by technology.

## 1 Introduction to the Social Interpretation Project

The Imperial War Museum (IWM) is a national museum whose aim is to enrich people's understanding of the causes, course and consequences of modern war. Based across five branches their mission is to enable people to have informed understandings of modern war and its impact on individuals and society (IWM, 2011<sup>1</sup>). This report documents the findings of a 12-month collaborative research project conducted by the University of Salford and MTM into IWM's development and implementation of the **Social Interpretation** (SI) project at two of its branches: IWM London, and IWM North in Manchester. Working with its technical partners Knowledge Integration (KI), Gooii, and The Centre for Digital Humanities, University College London (UCL), IWM's aim was to apply social media models to the interpretation of museum collections to provide new frameworks for audience engagement and 'social interpretation'. In the project IWM define social Interpretation as the representation of, discussions about, and the sharing of, their objects by audiences. The idea was to enable this social interpretation across all of the IWM digital platforms and outputs, in-gallery, on-mobile and on-line, in order to encourage and facilitate the type of social interaction that is more usually associated with social media, such as blogs, Facebook, Twitter and YouTube.

### 1.1 Project Aims and Objectives

The SI project aimed to use social media models, that is to say the ability to like, comment, discuss, collect, and share things on and across digital platforms. The aspiration was to create a service that encouraged audiences to respond to IWM's themes and collections through several forms of digital interaction and participation both in the gallery and via mobile and online platforms.

Specifically, the SI project explored whether:

- Applying social media models to cultural collections has the potential to increase audience engagement and reach.
- Social moderation is an effective response to the challenges posed by representing public comment and discussions in physical and digital cultural spaces.

#### 1.1.1 The Kiosks

To enable this digital interaction and participation IWM and its technical partners (UCL and KI) developed and installed six fixed 'comment and information' kiosks, each containing an interactive touch screen, in the 'A Family in Wartime' temporary exhibition in IWM London. These were situated next to a range of artwork and exhibits, including an infant's anti-gas helmet and an evacuee label (see Appendix 9.1 for a full list of the exhibits).

In IWM North similar 'comment' kiosks, with slightly larger screens, were installed next to four standalone large exhibits in the main exhibition hall. These included a tank, a fire tender, a field gun and 'Baghdad, 5 March 2007', Jeremy Deller's installation featuring the wreckage of a car damaged by bombing. The IWM used a range of criteria in the selection of the exhibits to be used in the SI project, such as popularity, practicality, and their place in narrative construction.

These comment kiosks gave visitors the opportunity to leave a comment or offer social interpretation in response to a 'prompt' question posed by the Museum. The kiosks in IWM London and IWM North differed in one key respect: those in IWM London had a dual 'voice' interface design, involving two screens – one a digital information label representing the museum voice and the other a comment screen enabling the visitor to have a voice. In IWM North the kiosks had only one screen, a comment, or what we could call a visitor voice screen.

An example of both types of comment kiosk is given in Exhibit 1.

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<sup>1</sup> IWM, Project proposal, 2011





Exhibit 1: Examples of comment kiosks at IWM London (left) and IWM North (right)

### 1.1.2 The QR Codes and App

As well as the comment kiosks, IWM placed QR codes next to six exhibits and artworks in 'A Family in Wartime', mostly small objects such as a dress made of parachute silk and a set of railway timetables. QR codes were also placed next to a significant proportion of the individual paintings in the Breakthrough Art gallery in IWM London. In IWM North, QR codes were placed next to nine objects in the main gallery, including a nuclear bomb, steelwork from the 9/11 World Trade Centre, and a child's gas mask.

There were some differences in the design of the QR Codes in the various galleries. In A Family in Wartime, the codes were relatively small and embedded in the existing object description labels. By contrast, those in Breakthrough Art and IWM North were larger and stood apart from object labels; they also included a question about the object, for example, 'Would this poster make you want to join the army?' In some instances they also included directions as to where to locate the object, for example, 'Look to your right to see a piece of the Berlin Wall'. Examples of the different types of QR code are provided in Exhibits 2, 3 and 4.

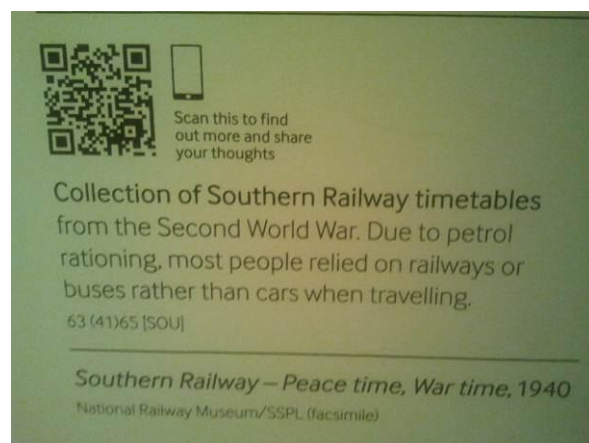
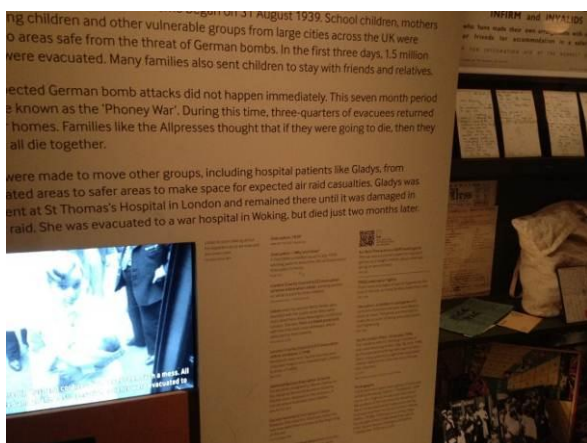


Exhibit 2: IWM London QR codes in A Family in Wartime



**Exhibit 3: IWM London QR codes in Breakthrough Art**



**Exhibit 4: IWM North QR codes**

The QR codes were designed to be scanned by visitors using their smartphones. After scanning a code, the visitor would be directed to a mobile webpage with further information about the corresponding object. To add an extra layer to this experience, IWM and its technical partner Gooii also designed and developed a bespoke iOS and Android<sup>2</sup> mobile application called 'IWM Scan and Share'. Once downloaded, this application enabled visitors who scanned the QR code next to an object to access its story, comment on it, share stories of their own memories and experiences, and create and share their own museum collection via a range of social media. The mobile website and app are illustrated in Exhibit 5.

<sup>2</sup> It should be noted that the Android version of the app was not released in time to be included in the fieldwork. Discussion of the app in later chapters therefore related solely to the iOS version

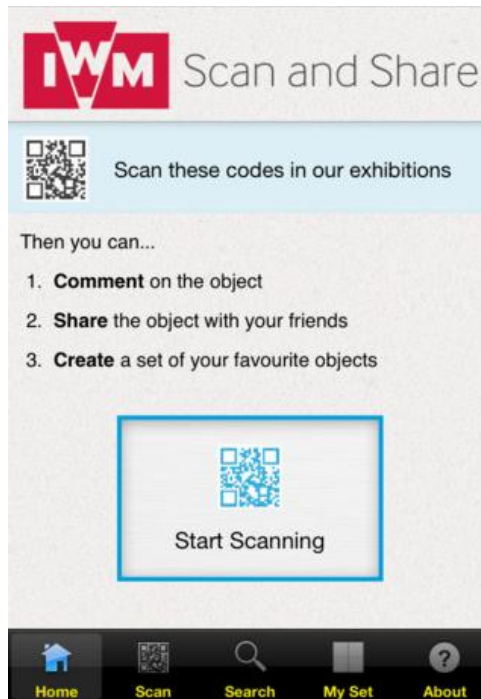
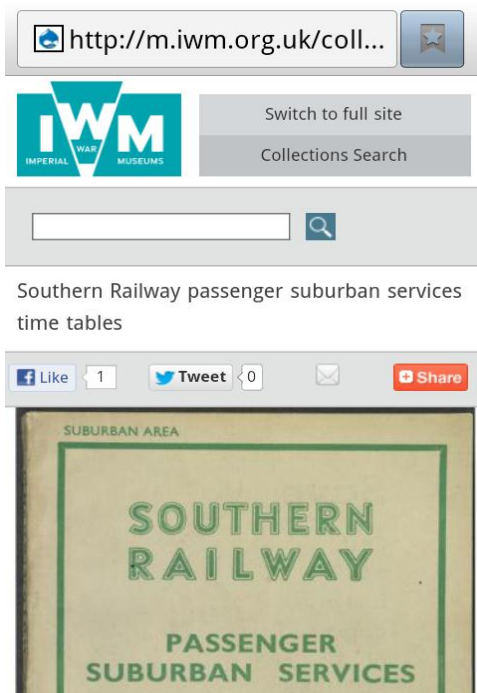


Exhibit 5: The IWM mobile website and Scan and Share iOS app

### 1.1.3 The IWM website

To complement the mobile app, IWM also added social interpretation elements to its website. Visitors to the website were able to curate and annotate their own unique collection of objects and then share them with friends. They were also able to offer social interpretation by adding comments to items in the collection, and to read what other people had to say about objects in the collection. This aspect of the website was designed to connect to the app, in that, once an IWM account had been created, any collections that had been made by the users should have been accessible on both platforms. The website is illustrated in Exhibit 6.

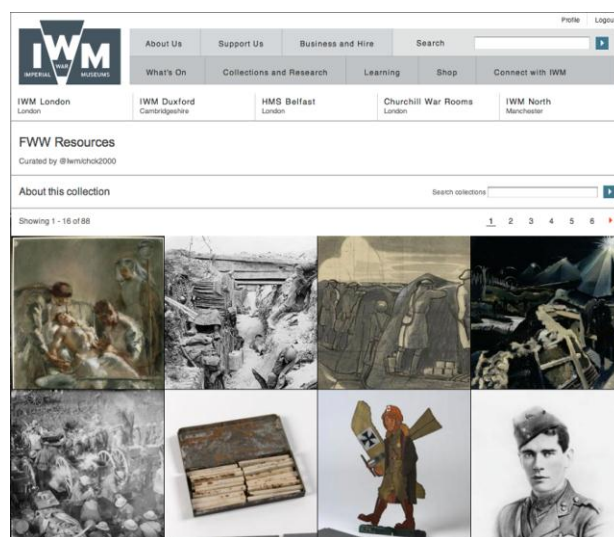
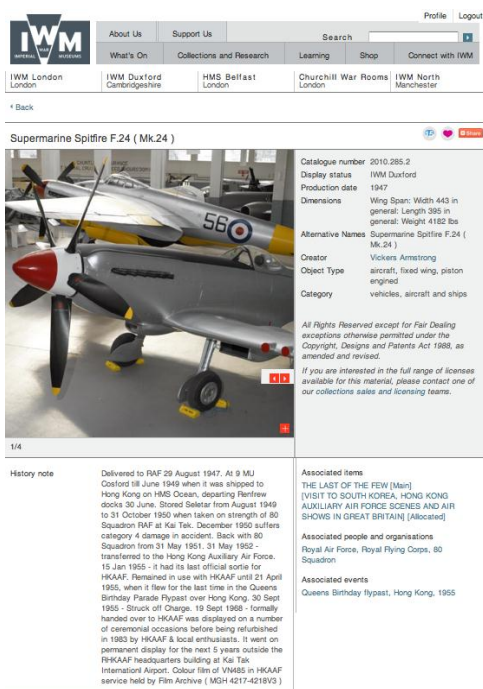


Exhibit 6: The SI section of the IWM website

#### **1.1.4 Social moderation**

The SI project also aimed to explore the effectiveness of, and the risks and challenges involved in, using community or social moderation as a means of dealing with the representation of public comment and discussion in physical and digital cultural spaces, whether in or outside the Museum. This is of special importance when the objects in question could be perceived as 'risky' or controversial. To examine this issue, IWM adopted a particular model of moderation. Comments made through the kiosks, app and website, once approved via an automated profanity filter, were not usually reviewed by IWM staff before being made public (although staff were able to review and moderate comments once they had been made). There were a handful of instances where IWM staff moderated kiosk comments that had not been reported by a visitor; only 376 comments were made via the website and some of these comments were also moderated by staff (without them being reported by another website user) on an ad hoc basis. In general, moderation by IWM staff only occurred if a comment was reported. The primary role of moderator, and the task of moderating and reporting 'inappropriate' comments, was instead given to the museum visitors themselves. Visitors were able to 'like' or 'dislike' comments, and could also touch a 'remove' button on the comments screens to indicate that they felt the comment in questions should be removed.

## **2 Literature Review and Research Questions**

### **2.1 Introduction**

As we have seen above, the SI project sought to use social media models to explore new ways of engaging and interacting with museum audiences to see if that offered a potential new means for arts and cultural organisations to increase audience engagement and reach. Additionally its use of social interpretation could be seen as an attempt to re-balance the audience authority relationship in museums; to give the visitor more of a voice in the museum and to enable them to participate in content creation. Furthermore, the employment of social moderation provided an opportunity for consideration of the potential for, and challenges of community moderation in, museums and other arts and cultural organisations.

In the light of this, the discussion of the literature below draws on and engages with some of the key debates around museum audiences, with regard to engagement and reach, the role of social interpretation, issues of risk in social moderation, and the use of social media to democratise access to, and to enable the distribution of, different forms of knowledge.

#### **2.1.1 Audience Engagement and Reach**

In their report 'From indifference to enthusiasm' Bunting *et al.* (2008) analysed data from the Taking Part annual survey of cultural participation. They concluded that the key factors which influence arts attendance are education and social status, the most educated and those with higher social status were more likely to have higher levels of attendance. The most recent data from the Department of Culture, Media and Sport (DCMS) indicates that between 2005/06 and July 2011 to June 2012, the proportion of people who had visited a museum or gallery in the last year had significantly increased from 42.3 per cent to 51.3 per cent. However, importantly, it was people in higher ACORN groups who had the highest attendance rates in the last year, with those categorised as Wealthy Achievers (58.5 per cent) and Urban Prosperity (67.6 per cent) attending considerably more than the Hard-pressed (36.7 per cent).

It is argued that the importance of social status indicates that some people are uncomfortable attending museums or arts events, and that they do not perceive arts attendance as an accessible or appropriate lifestyle choice, believing instead that they are not for 'people like me' (McMaster, 2008:11). A solution to this, it is suggested, is to bring the arts into people's everyday lives, public spaces, local communities, and find new ways to develop a greater sense of public ownership of the arts, indeed to make the arts more relevant (McMaster, 2008). The SI project speaks to these contemporary debates regarding the need to engage people in arts attendance, particularly where social status may militate against this. By drawing on social media models that encourage participation, the IWM's aim was to use the SI project to try and 'speak' to diverse audiences and to extend its reach into the everyday lives of its audience.

How we think about and conceptualise audiences (Abercombie and Longhurst, 1998; Jenkins, 2006) has changed significantly in recent times. This has had a profound influence across the arts and cultural sector, and especially within the area of museums. Since the arrival of the 'new museology' (Vergo, 1989) there has been an increased focus on the demographic of the visitor, a desire to re-construct the audience/visitor encounter in terms of experience (Bagnall, 1996; Kidd, 2009), and very recently an emphasis on 'dialogue, conversation and even democracy' (Kidd, 2011a:65). The intention has been to make collections more relevant, accessible and democratic, thus allowing the audience to feel more engaged and to have a greater sense of ownership, connection and participation.

The key of course is how to achieve this, and the important question is, whether digital technology and social media, such as that employed in the SI project, with its in-gallery, online and mobile applications does actually encourage and enable the audience to engage with the museum in different ways, or indeed extend the reach of the Museum, literally to other people, or virtually to other digital platforms and spaces. This is a significant issue, for as Jenny Kidd (2011a) has highlighted, many other museums have also looked to different forms of social media to do the job of enabling, or facilitating these types of exchanges, or what IWM have called social interpretation, with somewhat mixed outcomes and varying degrees of success.

This is an important area for research as there is an on-going tension between 'new' modes of interpretation in museums, with their emphasis on the experiential, and their agendas of access and inclusion, and the perception of some critics that there is a lack of attention to, and upon, the 'object'. Many critics have derided what they regard as the increasingly media and spectacle-dominated exhibitions in twenty-first century museums, with their adoption of digital technologies, conspicuous consumption and an emphasis on novelty (Message, 2006). It is suggested that there is homogeneity, visual similarity and a shared approach to representing material culture and storytelling across the museum sector. Indeed, Fleming (2005) argues that curators see objects as almost irrelevant to the museum experience; whilst Baudrillard (1983) claims that the museum is now just another simulation machine no longer distinguishable from television. Yet, it has also been claimed that museums are increasingly popular very much because of the materiality of their objects, an experience which is not available to the consumer of television (Bagnall and Rowland, 2010).

This is important in the context of this research; previous analysis of visitor responses at a number of UK museums has shown the importance of objects, and the ways in which they function not as static and reified relics, but as active producers of meaning. They allow visitors to connect to personal and cultural memories and biographies, and to practise and perform forms of reminiscence (Bagnall 1996, 2003, 2007). The appeal of certain objects is the emotional impact that they evoke and the feelings they mobilise. Important here is the identification of performance and the performativity of emotions as a key part of audience activity and the visitor experience. Museums who deal with emotive and controversial areas, such as the IWM, have to give careful consideration to this. Of particular interest here is the way in which the SI project may enable, capture and represent this performance across a range of digital platforms, but also of significance is the way in which this performance is mediated through and by digital social media. This also allows us to critically engage with the idea of the 'digital actor' and the role of performativity both inside and outside the museum site, and within digital and physical spaces, particularly with regard to the ways in which such performance may be emotionally charged when played out or represented through social interpretation.

Connected to this is the growing trend in many museums to present objects in the museum space as if they were pieces of 'art' (Marshall, 2005). To illustrate this there is a Harrier jet in the IWM North whose isolation and mode of presentation at the 'North Pole' of the exhibition space is emblematic of this form of representation. Exhibiting in this way enables aesthetic contemplation, and increases the viewer's sense of its operation primarily as an aesthetic object rather than as a defunct sign of warfare (Bagnall

and Rowland 2010)<sup>3</sup>. Of interest here, is how and whether that relationship with the object changes, and is transformed through the SI project, and the influence that has on the depth of audience engagement.

### **2.1.2 Social Media, Risks and Rewards**

The rise of 'Web 2.0' technologies and 'new' social media incorporate a common discourse of a 'participatory turn' and new forms of 'interactivity'. In this discourse, older media forms, such as television and radio, are often cast as passive, compared to new participatory technologies such as the Internet. It has been argued that the internet plays an important role in reconfiguring social networks, online and offline (Gennaro and Dutton, 2007). Further, it appears that Wittel's (2001) hypothesis that 'network sociality' will become ever more important is coming to fruition. Socialisation for many has become deeply embedded in technology; it is information, ephemeral but intense, and is characterised by an assimilation of work and play (Wittel, 2001: 71). However, it is important to remain cautious, and even sceptical of such (at times) utopian claims of the democratising powers of new technological forms, given that a significant, albeit decreasing, minority of the UK population do not have, or do not desire, access to the Internet (Ofcom 2012).

With such important caveats in place, it is however clear that a greater number of people are now engaging with the Internet, and social media is seen as a promising mechanism for engaging a wider audience. If we focus upon the potentials of social media for the SI project, then it is clear that such arrangements can expand patterns of engagement, through: defining one's tastes, and individual and groups identities (Boyd 2006; Liu 2007; Livingstone 2008); and facilitating leisure, play and creative practice (Griffiths and Light 2008; Light *et al.* 2012). However, such engagements are, we would argue, further complicated by the 'risky' nature of many of the artefacts and exhibitions that the IWM offers to its audiences. Yet, our interpretation of the literature thus far is that there is minimal research that considers such issues. Although, Stevens and Toro-Martell (2003) argue that the introduction of new technology may disrupt the familiar museum experience, disruptions can of course be positive or negative, depending on the pedagogical and curatorial values of particular museums. Yet risk, as conceptualised in studies of museums, often translates into the risks associated with the maintenance of the environment of objects in order that they do not deteriorate.

The underlying issues for this project are: a) the risks posed to the museum as a result of their 'hands off' approach to moderation of visitors comments via kiosks, the app and the web; and b) the risks visitors face in terms of commenting upon objects. As Alua (2010: 45) states: "In social media services, users mostly generate unverified information – both true and false – and put forth ideas about organizations that can greatly differ from what organisations share with the public – that is, an organization's own idea of what it wants to be." Underlying this problematic is a need to consider the SI project as underpinned by certain aspects of the notion of 'networked publics' (Boyd, 2008). Such publics: are persistent, they lack the ephemeral quality of speech and act in unmediated settings, display searchability so that users can be found, enable replicability in that posts can be represented out of context. Moreover, this is augmented by a fourth feature, invisible publics, whereby it is difficult (if not impossible) to detect who might observe, read or share our content, or content related to us. In short, the risk for IWM and their visitors are that, in sum, a comment is made by a visitor about an object and that is publicly available via digital networks, and that this comment causes harm. This harm could be manifest, for example via reputational and legal impacts upon IWM and or the visitor in question. Such a situation is possible due to the moderation model being deployed by IWM, the affordances of the digital media in place, and the effectivities of the visitors to engage with the said arrangements.

### **2.1.3 The Audience/Authority relationship**

Social media has the potential to 'amplify the voice' of ordinary citizens' (Hindman, 2008:6), and increasingly museums have turned to this model as a means to engage new communities, and to

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<sup>3</sup> 'The Crusader', a seven-metre-high, three-dimensional structure covered with a web of war-torn building, which is actually an artwork by Gerry Judah, is presented in a similar way at the IWM North.

demonstrate responsiveness and accountability (Kidd, 2009). Although there has been a flood of projects using new media forms to voice the stories and interpretations of members of the public, participatory in character, it is argued that these projects do little to enable the participants to have control, become the voice of authority, or challenge the 'top-down' role of the museum (Kidd, 2009). Indeed, it is claimed that museums struggle to negotiate and accept the challenge to their authority that the project of 'becoming social' entails (Kidd, 2011a: 71). In its use of social interpretation it could be argued that there is within the SI project an attempt to re-balance the audience/authority relationship in museums.

It is clear from much audience research that visitors construct and want museums to be experts, educators, and purveyors of truth; places to be trusted, where the visitor believes they can find some objective truth (Bagnall, 1996; Goulding, 2000). Museums are sites of contestation (Macdonald, 2010), which makes this trust questionable, perhaps even naïve. However, for many this is a key means of distinguishing museums from similar cultural locations, such as heritage sites, or other leisure destinations. Underpinning this is the idea that the museum is a place of formal and informal learning (Falk and Diering, 2000; Leinhardt, *et al.*, 2011) and more implicitly that it is a site of cultural capital (Bourdieu, 1984). Importantly, this notion of trust is essential in validating the visit, and in securing the status of museum visiting as an expression of 'taste'.

The SI project provides an opportunity to develop an understanding of how social media is used within a museum context and the power structures implicated in this. And indeed whether the use of social interpretation de-stabilises the authority of the museum and democratises knowledge, and in so doing whether it devalues and undermines the museum's role as an educator, and as a site of formal learning and cultural capital. As Kidd (2011a) has argued the authority of museum professionals can be called into question by museum audiences following the introduction of social media applications. Clearly, there are risks associated with genuine attempts to share content creation. However, it is also argued that there is a need to do more than pay lip-service to notions of empowerment, which is a real possibility in risk-averse museums (Kidd, 2011a).

It is clear that there are risks and challenges within the SI project, with regard to the potential re-configuring of the audience/authority relationship at the IWM. Indeed, it is important to consider whether museums and other arts and cultural organisations, or their audiences, are ready for this challenge to their authority and if not, whether social interpretation is nothing more than box-ticking and tokenism. It is important to gather evidence about the status of the new informal knowledge that is produced; gain an understanding of whether people feel empowered, and on how people value and judge others' social interpretations. Key also is how this activity is characterised, and understood with regard to formal and informal learning. Hence, the findings of this research could have significant implications beyond this initial study, in helping to shape inclusive and empowering models of social interpretation that could be applicable to other museums and other arts and cultural organisations.

## 2.2 Research Questions

In light of the aims of the SI project, and drawing on the relevant academic literature above the research team from University of Salford and MTM London<sup>4</sup> identified three broad areas of research inquiry: engagement, risk, and authority. Through our research we aimed to investigate the potential for, and risks in applying social media models to cultural collections, to facilitate social interpretation, to increase audience engagement and reach, and to re-balance the audience/authority relationship.

The three over-arching research questions we set ourselves were:

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<sup>4</sup> The team from the University of Salford consisted of academics with research expertise in the field of museums, audiences and social media models, whilst MTM are a leading commercial consumer insight agency in social media and the creative and cultural sectors. The research was collaborative with MTM and Salford both fully inputting into all aspects of the research design, data collection and analysis.

- 1. How and if social media models enable social interpretation and encourage audience/s to engage with the IWM in different ways.**
- 2. What are the challenges and risks of the use of social interpretation and the representation of public discussions in physical and digital cultural spaces?**
- 3. Whether the use of social media models facilitates a re-balancing of the audience/authority relationship.**

Firstly, we investigated how and if social media models enable social interpretation and encourage audience/s to engage with the IWM in different ways.

To do this we examined:

- To what extent does the SI service increase levels of engagement amongst visitors? How is this manifested (an entertainment or learning experience, to aid recollection/retain information)?
- Is this increased level of engagement reflected in behaviour – e.g. length of visit, propensity to return, propensity to tweet/comment on Facebook in the following week?
- Does SI increase visitors' enjoyment of the exhibition? This will include exploring the degree to which visitors think others will enjoy the exhibition and would recommend it to others, and how this varies by who those 'others' are.
- Does the use of social media engender feelings of connectedness to the object, to the museum and its collections, to other visitors, and to the wider audience for the museum? What motivates people to share the objects and their comments via social media?
- To what extent do IWM visitors use social networking sites (SNS) generally, and specifically with respect to their arts and cultural experiences?
- Which other organisations do IWM visitors engage with using SNS?
- How does IWM currently fit into visitors' offline 'social networks'? By that we mean – who do they visit with, who do they talk to about it?

**Secondly, we investigated the challenges and risks of the use of social interpretation and the representation of public discussions in physical and digital cultural spaces.**

To do this we examined:

- What is the extent, form, and content of the comments and the community moderation of them?
- How are different museum communities represented in the comments, and what is the role they take in moderation?
- How are comments around 'risky' objects moderated and by whom? (For example, objects such as a nuclear weapon, things that might attract highly emotive, distasteful and/or provocative comments).
- How does community moderation encourage people to take ownership, and examine who they are acting for when moderating (i.e. the Museum, themselves, other stakeholders/interest groups)?

**Thirdly, we investigated whether the use of social media models facilitates a re-balancing of the audience/authority relationship.**

To do this we examined:

- Whether the use of social interpretation de-stabilises and challenges the authoritative voice of the museum?
- To what extent is there evidence of the democratisation of knowledge through social interpretation?
- What are the audience's perceptions of these interpretations, how are they valued, what weight is given to them, whose voice is recognised, and what resources are drawn upon in this process of recognition?



### **3 Research Methods and Data Strategy**

#### **3.1 Introduction**

The research was undertaken at both IWM London and IWM North, before and after the installation of the SI technology. The team employed a range of research methods, including interviews, focus groups, a visitor survey, in-gallery observation, and textual and interface analysis. Quantitative and qualitative data was collected and analysed at both sites. Using a mixed method approach enabled us to capture visitors' stated views and preferences, but also allowed us the opportunity to observe and gain insight into actual audience behaviour. Indeed, studying visitor behaviour in its natural setting (Denzin and Lincoln, 2000) and attempting to make sense of or interpret phenomena in terms of the meanings people bring to them was a key strand to our approach.<sup>5</sup>

#### **3.2 Visitor Interviews**

Prior to the implementation of the SI digital media technology, the team conducted 20 semi-structured accompanied 'walking interviews' with visitors/visitor groups to IWM London and IWM North (ten in each location). The interviews were undertaken in March at IWM London and in June at IWM North. In September, when the various elements of the SI technology (Comments Screens/QR codes/App) had been fully implemented across both sites (with the exception of the Android app), we conducted a further 20 semi-structured accompanied walking interviews, ten at IWM London and ten at IWM North.

A recruitment guide was devised for both the pre- and post-implementation interviews that enabled us to select a cross-section of different visitor types (Falk, 2009) that were reflective of the IWM visitor profile, and a range of socio-demographic factors. In order to ensure we covered the full range of visitor types, interviews were conducted on weekdays and weekends, in both sites, both before and after the installation of the SI technology. The recruitment criteria and the profile of the visitors interviewed pre- and post-implementation of SI can be seen in Appendix 9.5 and 9.6.

'Walking alongside' research participants in order to observe, experience, and make sense of everyday practices has a long history in ethnographic research (Clark and Emmel, 2010). Indeed, 'walking and talking' methods have been used widely across the social sciences; for example, to gain a better understanding of place and neighbourhood attachment (Clark and Emmel, 2009), shopping, (Miller, 1998), and museum visiting (Newman and McLean, 2006). In our case, using this approach allowed us a greater insight into, and understanding of, the way in which the visit is experienced both physically and emotionally.

The interview guides we developed and employed for both the pre- and post-implementation interviews enabled us to observe, ask questions about, and capture the full experience of the museum visit in context, both before and after the implementation of the SI technology. We were also able to explore the wider cultural and museum-visiting practices of the participants, their current use of and perspectives on digital and social media, and their thoughts on the role and risks of social interpretation. The walking interviews also afforded some opportunities to discuss the functions and interfaces of the kiosks, apps and QR codes in situ. We also collected a range of demographic data from the participants. The accompanied interviews were between 45 minutes and 60 minutes in duration. Findings from the interviews were captured through written notes, and audio recorded to assist with the analysis process, and the data from them coded and subjected to thematic analysis.

#### **3.3 Visitor Focus Groups**

In October after the full implementation of the SI technology, we conducted two semi-structured focus group interviews with a cross section of recent visitors to IWM London and IWM North. Each focus

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<sup>5</sup> The methodological approach taken and the research tools deployed were scrutinised and approved by the University's research ethics committee prior to the commencement of data collection. All participants completed and were provided with a copy of a research consent form. This informed them about the purpose and nature of the project and gave them the contact details of the lead researcher, enabling them to ask further questions or request removal from the research. All visitor participants were also given £40 as a thank-you for their participation in the research.

group had seven participants and lasted 90 minutes. We conducted one in London, for the IWM London visitors, and one at IWM North for their visitors. Participants for the groups were recruited according to specific criteria, to ensure a representative and informed sample. The full list of criteria can be found in Appendix 9.3. Both the focus groups were recorded and transcribed and the data from them coded and subjected to thematic analysis.

Focus groups are extremely useful as they provide a dynamic and flexible means to gather detailed qualitative information. They also have the benefit of, to some degree, replicating social interactions that occur outside of the interview setting (Morgan 1997). The discussions are relaxed, and aim to enable participants to share their ideas, opinions and perceptions on a defined area of interest (Krueger and Casey, 2009). In this instance, the focus group interview guides and stimulus material we developed, such as images of the technology in situ (kiosks, QR codes), a selection of comments from the kiosks, and images of the various interfaces of the different technologies (kiosks, and app), enabled us to gather group opinion on the various features of the SI project. Through this group discussion we were also able to access views on social interpretation, more generally, as well as opinions on the acceptability of, and ways of valuing the comments made through the SI technology. They also proved to be a useful tool for understanding how this form of 'collecting' and interpretation might be discussed and utilised through other social media and in other arts and cultural contexts.

The focus groups also involved discussions *at interface*; in that, in line with recent methods in new media research, participants were encouraged to try out the SI mobile technologies during the group and were asked to reflect on them as they interacted with them and discussed them with the others present. This allowed us to understand the use of the Scan and Share app, not just from the perspective of an individual's use of a specific technology, but also how this might be embedded in the interactions of everyday life, and particularly in participants' engagement and interaction with museums and the arts and culture sector.

### **3.4 Visitor Survey**

Although the majority of the research conducted with visitors was qualitative in nature, the research team felt it important to generate some quantitative insights into the ways that visitors had responded to the implementation of the SI technology, to lend robustness to our conclusions. In order to complete this research as quickly and effectively as possible, it was decided to make use of the rolling programme of visitor research conducted by IWM. This involves a survey of visitors carried out every month, on both weekdays and weekends, at each of the five IWM locations, with the aim of capturing insights into visitor behaviour, satisfaction, attitudes towards the museum and so on. The survey questions are updated every quarter, and reporting is also done on a quarterly basis.

The project team added five bespoke questions to the survey for Q2 2012 (July to September, on IWM's annual schedule). The questions focused on the comment kiosks, as at the time of the survey these were the only element of the SI technology that had been fully implemented. They were designed to explore awareness and usage of the screens; what users enjoyed about them; suggested improvements, and reasons for non-engagement. A full list of the questions is contained in Appendix 9.2.

The same questions were run in both IWM London and IWM North, albeit with some differences in sampling approach:

- In IWM London, the total survey sample for this period was 205 individuals. However, the bespoke SI questions were only asked of a subset of 101 visitors who visited the 'A Family in Wartime' exhibition, and therefore had a chance to be exposed to the comment kiosks.
- In IWM North, the total survey sample for this period was 111. However, due to the later implementation of the screens in IWM North, the questions were asked of a subset of 81 individuals who visited the museum after the comment kiosks went live (21<sup>st</sup> July 2012).

Data were collected and collated by Morris Hargreaves McIntyre, the company that conducts the visitor survey for IWM, and provided to MTM for analysis in mid-October 2012. The data were weighted to match the typical visitor profile, so that the sample was representative of all visitors.

In addition to analysing the responses to the bespoke questions we had included, MTM also cross-tabulated these with visitors' responses to other questions contained within the survey. This allowed us to gain insights into, for example, whether use of the comment kiosks appeared to have had any impact on overall satisfaction with the visit to the museum.

The data from the survey have been reported throughout this report to provide quantitative support for the conclusions drawn by the project team. It should be noted that, in some cases, the base sizes for figures quoted are small. Where bases are under 80 people, conclusions made on the basis of these figures should be treated as indicative only.

### **3.5 Observation**

Both before and after the installation of the SI technology, researchers in IWM London and IWM North spent a number of days in the Museums, walking around the relevant galleries, familiarising themselves with the exhibitions, the interactive technology (both the new kiosks/QR codes and that already in place), the museum layout, and the overall location. This enabled us to observe and begin to make sense of visitor activity, movement and behaviour in context. Bauman (1992:155) has stressed the importance of this type of work, as he says: *"it becomes a philosopher and an analyst of his time to get out and use his feet now and again. Strolling still has its uses."* Indeed, this research method allowed us to observe activities, interaction, and behaviour that might not otherwise have been reported to us. It enabled us to observe the sequence of actions and events that make-up the museum visit and the interaction with the technology.

We made notes about what we saw and heard as visitors interacted and engaged with the museum. This was useful data in that it helped us in the development of our interview and focus group guides, but also in that it allowed us to get a better sense and understanding of the overall visitor experience.

### **3.6 Staff Interviews**

We conducted semi-structured one-to-one interviews with five Visitor Services Assistants at IWM London and five gallery-based Security Officers at IWM North. The interviews lasted approximately 15-20 minutes. The strength of this semi-structured approach is that it allows for a degree of consistency whilst still enabling flexibility (Bryman, 2008). Whilst we asked a number of set questions in each interview, we were also able to pursue areas of interest and relevance that arose in the course of conversation.

The interviews were undertaken in September and October, towards the end of the project. By this stage the kiosks and QR codes had been in place in IWM London for approximately five months, but had only been in situ for a shorter time in IWM North – two months for the kiosks and a matter of weeks for the QR codes.

At both IWM London and IWM North the staff selected for interview had all spent a good deal of their working day in the relevant gallery spaces. A key part of their job involves observing what visitors do whilst on the gallery floor, for the purpose of ensuring the security of the Museum and its exhibits, as well as other visitors. Staff members are also there to respond to questions and help to guide and direct visitors when asked to do so. Given their role, therefore, the staff interviewees were well-positioned to offer a perspective on the extent and nature of usage of the in-gallery technology, based on their observations over the duration of the project.

Consequently, through the interviews we were able to gather staff perspectives on the degree to which visitors noticed and engaged with the technology in the galleries, and the types of interaction that took

place. We were also able to see if staff had interacted with the visitors about the technology, and if so what form that interaction took. Finally, we were able to gather staff opinion on the technology, and their ideas on how, in the light of their observations, it might be improved.

The staff interview guide can be found in Appendix 9.4. Findings from the staff interviews were captured through written notes, and audio recordings and the data from them coded and subjected to thematic analysis.

### 3.7 Visitor Comments: Textual analysis

We also undertook a series of textual and content analyses of visitor comments made through the kiosks and website. We analysed comments for all objects over the period 20 March-7 November 2012 for IWM London and 16 July-7 November 2012 for IWM North. We identified the extent of the commenting, the form and type of comment made, and the patterns of comments and commenting within the data. We also looked at the extent, degree and form of moderation, and the type of comments that were moderated by visitors, the museum, or both. We noted the number of likes and dislikes for comments, and the type of comment these judgements were attached to. Our comment categories, which emerged from the analysis, are detailed in Exhibit 7.

Category Group	Sub Category	Category Description
SI Evident	Answer to Prompt Question	A seemingly direct answer to the questions posed on the comment screen.
	Interpretation of Object in Question	A visitor has said something about the kiosk object in front of them, but has not answered the prompt question. They have engaged in their own interpretive experience.
	Interpretation of Object Elsewhere in the Museum	A visitor seems to have talked about an object or idea from elsewhere in the museum.
	Question Posed by Visitor to the Museum	A visitor has asked the museum a question – they are usually asking for more information/clarity regarding an object.
	Positive Comment about IWM	Visitor being positive about the museum overall, or the exhibition they are in.
	Negative Comment about IWM	Visitor being negative about the museum – usually someone commenting that the museum is boring.
	Possible Exchange	Due to the mode of presentation of visitor comment data, it was sometimes difficult to highlight dialogue that happened amongst visitors but some responses seemed to be responding to other comments or were a specific attempt at networking in, and beyond, the museum space – e.g. sharing of Blackberry Messenger details.
Intention Unclear	Intention Unclear	It was impossible to work out if some comments (e.g. Awesome!) were a response to a prompt, a response to an object, a reply to someone else or trolling. These comments were coded unclear as a sub category and category group.

Unhelpful	Only Name Entered	No comment made, only a name has been entered.
	Spam and Trolling	Garbage posts such as “xxklfgasldfja” and spammy stuff like Poo, Hello, Hi etc...

Exhibit 7: Categorisation of comments from the SI kiosks and website

What it is important to signal here is the high degree of variability in the nature of the comments made under the subcategories within the ‘SI Evident’ category group. Our rationale was to be non-judgemental and as inclusive as possible when categorising, to take account of the full range of interpretations and exchanges occurring throughout the project. For example, this includes people providing:

- A detailed response to a kiosk question prompt.
- More general interpretation of personal experience of the War.
- Those who engage with more aesthetic contemplation “I love the bright red colour of the trailer, it is amazing”.
- And the shorter “I think this place is amazing!”

Our rationale for this was to align with the philosophy of the project which we felt sought serious public engagement on a range of terms. This approach is valued because it can be a rich source of qualitative and quantitative data (May, 2001), and indeed here it was used to assist our understanding of how visitors had engaged with the technology, responded to the objects, and to the questions provided by the museum. Looking at this textual data also enabled us to identify what sort of ‘risks’ are attached to enabling social moderation, and it allowed us to see what both the museum and visitor identified as an inappropriate comment. Consequently, this textual data provides some insight into the visitor and museum outlook and beliefs around what can and should be allowed to be ‘said’ in a museum, and through its associated digital media, beyond the museum walls.

### 3.8 Technological textual analysis of the interfaces and functions of the technologies comprising the network

Light & McGrath (2010) argue that it is important to understand digital media where it is new or under revision, as this is where users are likely to be unfamiliar with arrangements and this will thus raise challenges, as digitally mediated arrangements emerge and disclose themselves. A similar argument has also been made in relation to mobile computing (Ferneley and Light, 2008). Therefore, taking as a starting point, the methodology of Light and McGrath (2010) who disclose the ethics of Facebook through a focus upon its ‘non-human’ elements, we engaged the kiosks, app and website in our analysis in order to understand their role in the SI project. In particular, attention was paid to: Functions (commenting, sharing and liking); Interfaces (layout, aesthetics and ease of use); Connectivity (the extent to which activity could be inputted, presented and outputted via a particular set of arrangements); Devices (PCs, Phones, Tablets) and Infrastructure (access to the Internet, speed of connection). This approach was embedded within our other data collection methods. Walking interviews involved observation and discussion with visitors regarding the digital elements of SI and demonstrations to elicit feedback. The post SI implementation focus groups also had specific time set aside to undertake an app walk through with participants and to elicit feedback on interface designs.

## 4 Findings and Results

### 4.1 Introduction

As set out in Chapter 2, the research focused on three broad areas of enquiry: engagement, risk and authority. This chapter sets out the key findings from the research relating to each of these questions. The conclusions made here draw on a wide range of sources, both quantitative and qualitative, spanning

several different elements of the SI service and two museum locations. Given this scope, the sample sizes are in some cases small.

#### **4.1.1 How do IWM visitors currently use social networks?**

An important part of the rationale for the SI project was the huge increase in the use of social media over the past five years, and the perceived potential for adopting these behaviours to facilitate sharing and reinterpretation of cultural objects. As well as providing a social platform in its own right through the comment kiosks, app and web site, the service was designed to be integrated with existing social networks through linking to Facebook and Twitter. Given this, part of our research explored the ways that IWM visitors currently made use of social media in their daily lives, and the potential for SI to complement this activity.

Most visitors that we spoke to during the walking interviews and focus groups were Facebook users, although usage varied significantly according to age and to some extent occupation, with older visitors more likely simply to have a presence on the site without actively using it. Only a handful of visitors were active on other services such as Twitter and Foursquare. The visitor survey suggests that 51 per cent of visitors in IWM North and 62 per cent in IWM London used Facebook, with Twitter at 20 per cent and 17 per cent respectively and Foursquare at 4 per cent and 3 per cent.<sup>6</sup>

Few visitors reported using social media as a means of engaging with arts and cultural content or institutions – for most, it was primarily a way of communicating with friends and family. Those visitors that did use social networks to engage with the arts and cultural sector often did so within the setting of social sharing, for example through recommending events to friends or commenting on other people's accounts. Sharing might also take place more directly, via email, if a visitor was keen to share their experience with an individual or small group.

These responses suggest that for a minority of visitors, there is a demand to capture and share cultural objects and experiences, and that SI therefore has the potential to complement their existing behaviours. However, it should be noted that this sort of activity was relatively infrequent, and was viewed by most participants as equivalent to other sorts of sharing, socialising and interaction via social media, rather than being a behaviour especially reserved for museums and other cultural contexts. One or two explicitly noted that sharing material relating to a museum was insufficiently 'trendy', suggesting that visitors will be more likely to share experiences or objects from museums in instances where they can identify a degree of social currency.

## **4.2 Do social media models enable social interpretation and encourage audience(s) to engage with the IWM in different ways?**

### **4.2.1 How did people use the SI technology?**

**Overall levels of interaction with the SI technology varied for the different elements of the service: awareness and usage of the comment kiosks in the galleries were significantly higher than awareness and usage of the QR codes, app and web site. In general, a much greater proportion of visitors engaged passively with the technology (by reading information or comments) than contributed actively (by making or responding to a comment, or collecting and sharing objects through the app and website). Importantly, this reflects general patterns of participation commonly observed in online user communities, but usage was also limited by a number of executional factors, not least of which was the preponderance of banal or childish comments left on kiosks.<sup>7</sup>**

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<sup>6</sup> Base: All visitors who answered the social media question on the visitor survey: IWM London = 178; IWM North = 111

<sup>7</sup> See Jakob Nielsen, [http://www.useit.com/alertbox/participation\\_inequality.html](http://www.useit.com/alertbox/participation_inequality.html)

This section sets out the quantitative and qualitative evidence from the research regarding interaction with each element of the service: the comment kiosks, and the QR codes, app and web site.<sup>8</sup>

4.2.1.1 Comment kiosks

**Awareness**

In both the IWM London and IWM North museums, awareness of the screens (amongst those who visited the relevant galleries) was relatively high: according to the visitor survey, 77 per cent of visitors to the Family in Wartime exhibition in IWM London noticed the screens, compared with 69 per cent of visitors to IWM North. These relatively high awareness figures are supported by the qualitative evidence from the walking interviews conducted in IWM London and IWM North. In both locations, almost all visitors noticed one or more screens during the interview.<sup>9</sup>

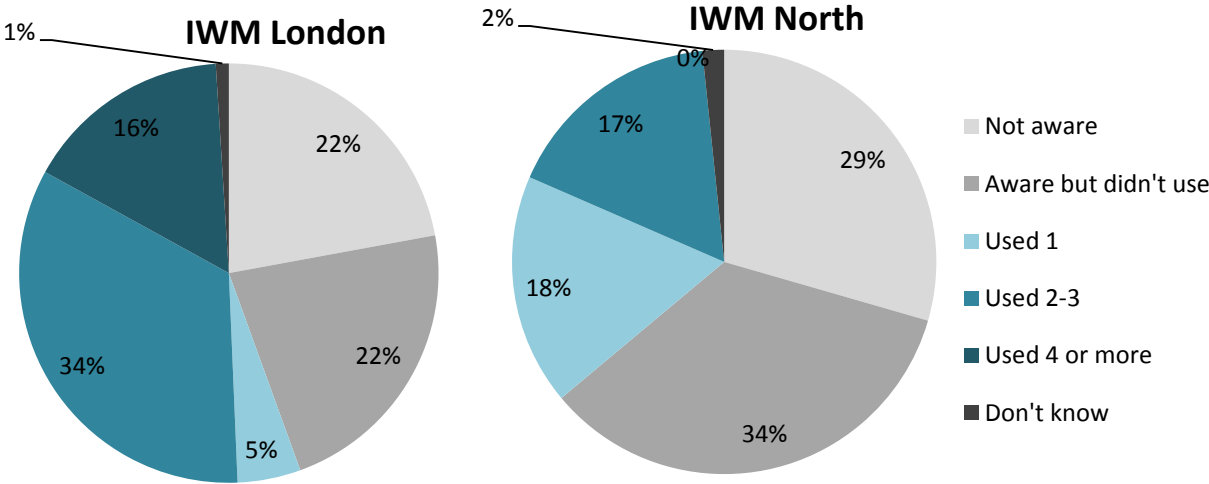


Exhibit 8: Awareness and usage of comment kiosks in IWM London and IWM North

A possible explanation for the slightly higher awareness figures reported in the IWM London survey is that, firstly, there were six screens in IWM London compared to four in the IWM North; and, secondly, that the IWM London screens were all contained within a relatively small space (the Family in Wartime exhibition), rather than being placed in the main exhibition hall as in IWM North (see Exhibit 1 above (i.e. the first photo exhibit) for an illustration of the differences in placement). Of course, IWM London visitors who did not visit that exhibition had no awareness of the screens at all.

Levels of awareness of the screens in both IWM London and IWM North varied according to visitor profile. Most notably, those with families showed the highest awareness (89 per cent in IWM London, 73 per cent in IWM North).<sup>10</sup> Based on our observations of behaviour in the galleries during the walking interviews, the higher awareness amongst families is likely to be due to the fact that children seemed especially prone to notice and interact with the screens.

**Kiosk Usage Levels**

Our survey defined usage as any form of interaction with the comment kiosks (Exhibit 8). As with awareness, usage differed across locations: 55 per cent of visitors to Family in Wartime in IWM London claimed to have used at least one screen, compared to only 34 per cent in IWM North. In the case of repeat usage, the difference between the two groups becomes even more pronounced: 50 per cent of the IWM London visitor sample claimed to have interacted with more than one screen, compared to just

<sup>8</sup> The original proposal for SI envisaged that the comment kiosks, app and web site would all be linked together, allowing comments to be shared between the three platforms. In the event, the screens were not connected in this way, and we have therefore reported on their usage separately.

<sup>9</sup> Base: IWM London = 101, IWM North = 81

<sup>10</sup> Base: IWM London visitors who attended Family in Wartime; families = 27; IWM North visitors; families = 29

17 per cent of visitors to IWM North.<sup>11</sup> This disparity could be accounted for by the different placement of the kiosks throughout the galleries, or to the differences in screen design, as illustrated in Exhibit 9. Once again, those visiting with a family were more likely to use the screens, with 80 per cent of this group in IWM London and 40 per cent in IWM North interacting with a screen at least once.<sup>12</sup>

The qualitative evidence of the walking interviews with visitors, as well as interviews with gallery staff members, suggests that usage of the screens was highest amongst children. This is likely to reflect the evidence from ‘family visitors’ in the survey.

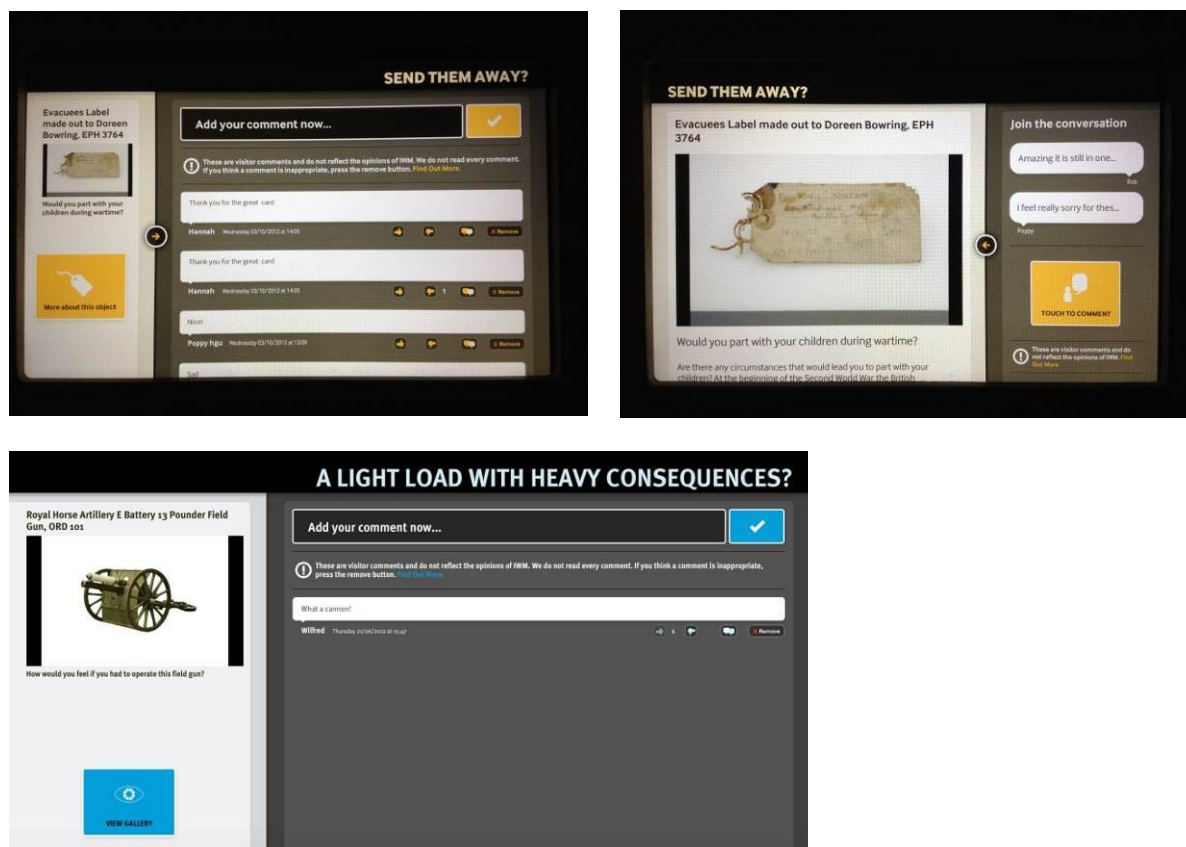


Exhibit 9: Comparison of the screen design in IWM London (below) and IWM North (next page)

## Types of Usage

From our survey data, of those who reported any sort of interaction with the screens, the majority were content to read other people’s comments rather than contributing their own (see Exhibit 10). In IWM London, 69 per cent of kiosk users read existing comments, while 10 per cent claim to have added their own. In the IWM North, 75 per cent read others’, while 17 per cent commented themselves.<sup>13</sup>

<sup>11</sup> Base: IWM London Family in Wartime visitors =101; IWM North visitors = 81

<sup>12</sup> Base: IWM London family visitors = 27; IWM North family visitors = 29

<sup>13</sup> Base: IWM London users of comment kiosks = 55; IWM North users of comment kiosks = 28. Given these low bases for calculations, percentages should be treated as indicative only.



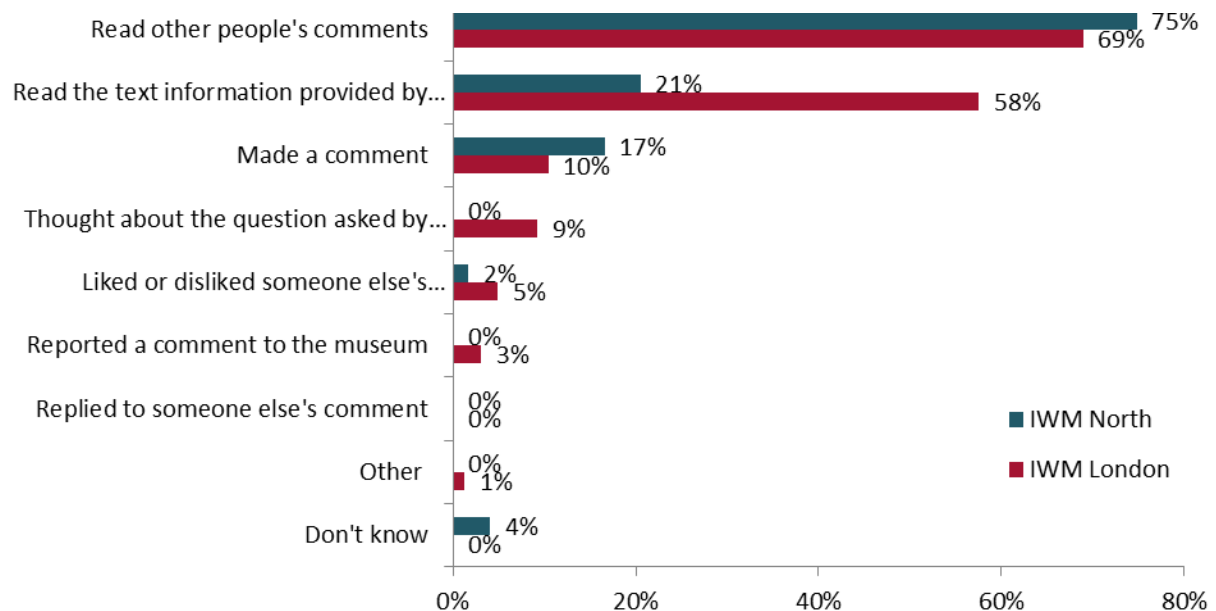


Exhibit 10: Types of interaction amongst users of the comment kiosks<sup>14</sup>

Following our experiences of IWM London and IWM North, our evidence suggests that the slight variation between the two locations, to some extent, reflects the differences in the design of the technology, as illustrated in Exhibit 9. In IWM London, the interface involved two screens between which visitors could swipe: one containing information and the other comments. In IWM North, by contrast, the interface consisted of a single screen showing visitor comments, and an image of the object. Visitors to IWM North are therefore more likely to have been exposed to visitor comments, and perhaps more incentivised to leave their own. The difference is also reflected in the number of users who claimed to have 'read the information provided by the museum': 58 per cent in IWM London, compared to only 21 per cent in IWM North.<sup>15</sup>

### Level of Commenting

The survey suggests that, overall, around 5 per cent of visitors who could have noticed the screens<sup>16</sup> in both IWM London and IWM North actually left a comment. However, we have also analysed the actual comments data collected from kiosks and Exhibit 11 displays those commenting levels, both in total and for the category group of 'SI Evident'. The time period for this analysis is 16 July-7 November whilst all kiosks at both sites were in operation, and please see Exhibit 7 for a reminder of which constitutes an element of SI and which does not.

From this data, it can be seen that 12,313 comments were made in IWM London and 7,817 in IWM North, in total. Comparing these levels to footfall data for the same time period over which we analysed comments data, we might suppose that 2 per cent of visitors to IWM London had commented (from 612,821 visitors during that time), and 8 per cent of visitors to IWM North (from 103,043 visitors during that, shorter, period of time). However, observations by the research team suggest that many of the commenting visitors probably left several comments each, and so the true proportion of visitors who left comments may have been slightly lower.

The small proportion of visitors commenting is in line with the qualitative evidence from staff and walking interviews. Although most visitors noticed the screens, relatively few chose to interact with them beyond a brief glance; and, while a small minority did stop to read the screens, only two or three (from the 20 interviews across both locations) made an attempt to leave a comment. Where this was

<sup>14</sup> Survey participants were prompted with a range of possible responses, and were able to select more than one

<sup>15</sup> Base: IWM London users of comment kiosks = 55; IWM North = 28

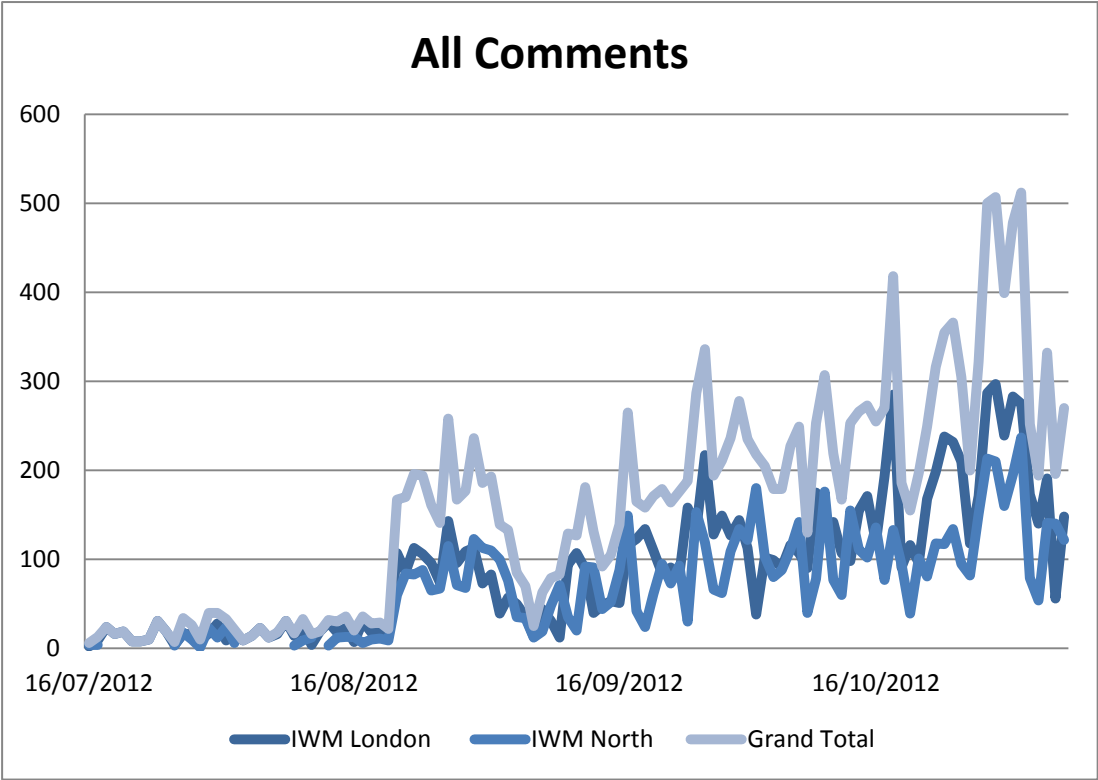
<sup>16</sup> That is, Family in Wartime visitors in IWM London, and all visitors in IWM North

spontaneous, the commenters were children present with the family group interviewees. One or two adults did show some interest in leaving a comment, but the researchers felt that this was likely to be the result of talking about the screens during the interview rather than a spontaneous action.

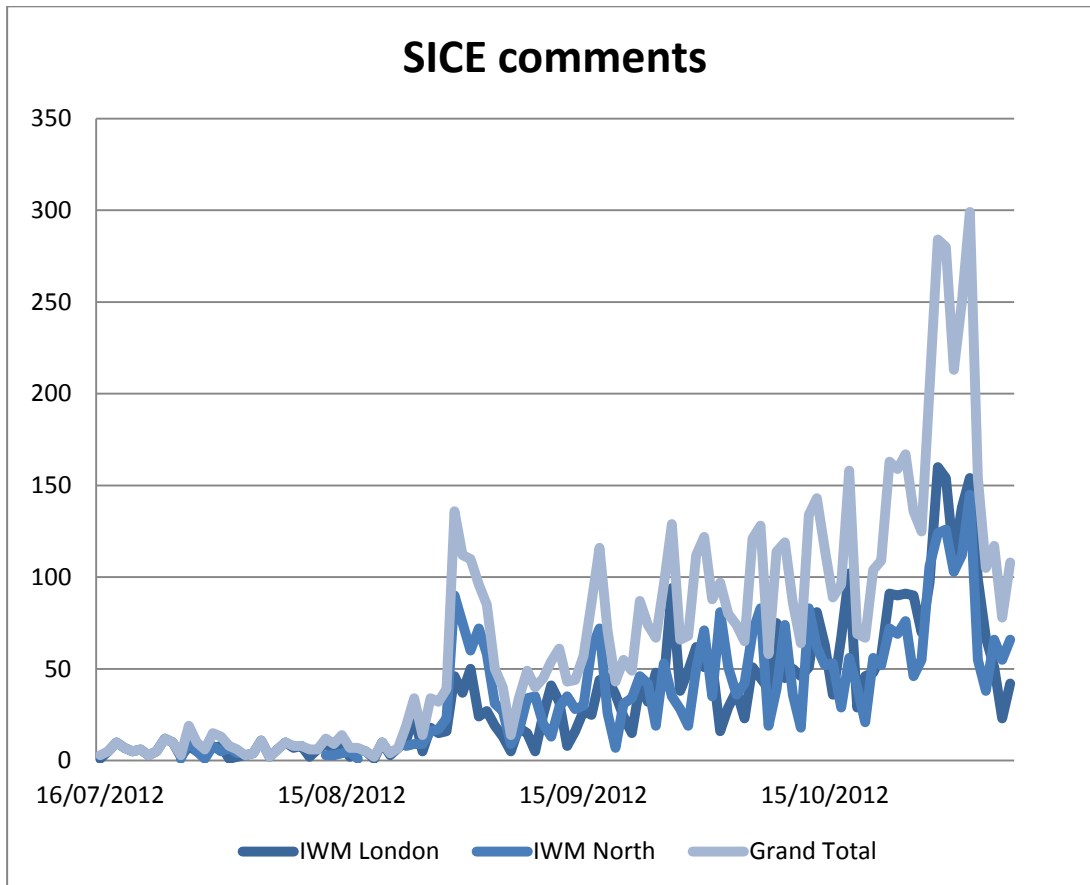
**SI Evident Comments**

The types of comments varied considerably. If we consider data relating to the overall project, using our group categories, 43 per cent of comments could be seen as SI Evident, 19 per cent as Intention Unclear and 38 per cent as Unhelpful.

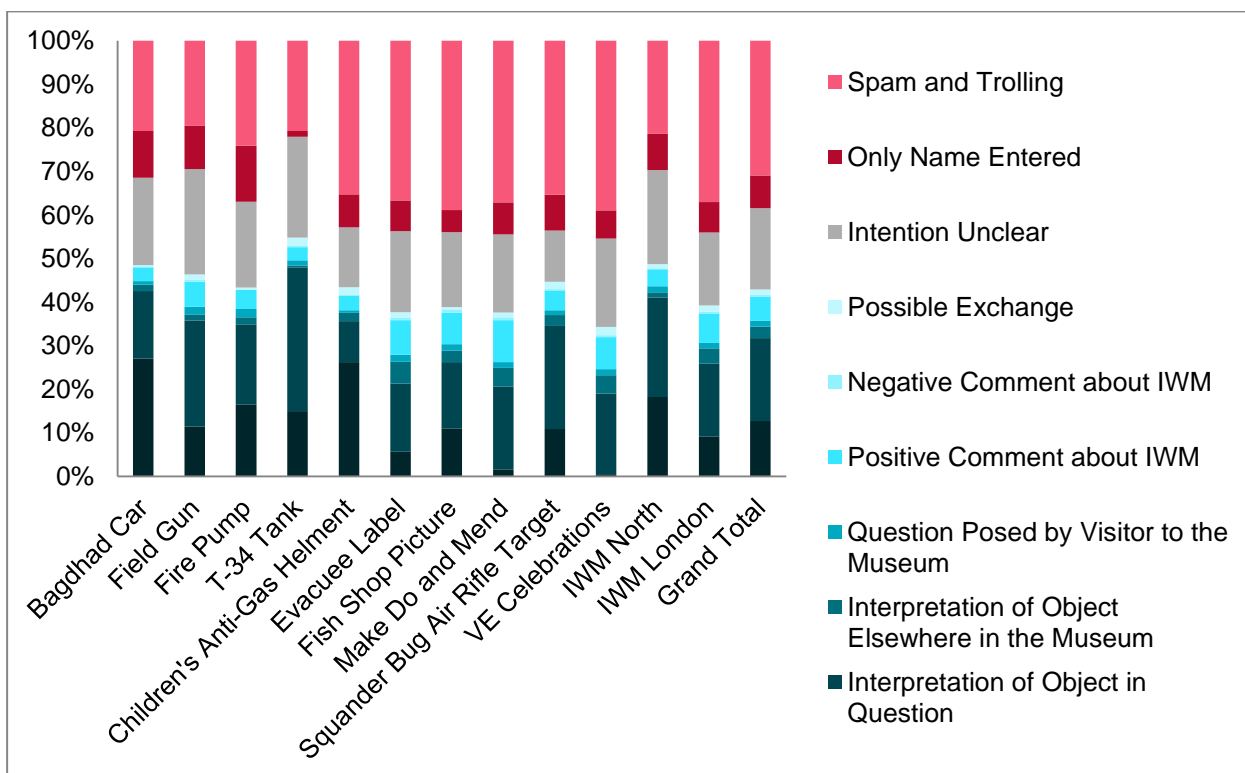
There were significant differences between the two locations (also shown in Exhibit 11), with 49 per cent of comments at IWM North being SI Evident (3,807 comments), compared to 39 per cent at IWM London (4,829 comments).



**Exhibit 11: Comparative analysis of incidence of commenting from 16 July to 7 November 2012**



**Exhibit 12:** Details the patterns of commenting across the objects at the sub category level, which shows that the objects with the greatest proportion of SI comments were the T-34 Tank and Baghdad car, in IWM North.



**Exhibit 13:** Types of comments left at each comments kiosk and at each site in total

## Barriers to interaction

As noted above, active use of technology to contribute comments is always likely to appeal to a minority of the users. As such it is unsurprising that the proportion of visitors who left comments was relatively low.

Participants in the walking interviews also identified a number of potential barriers to interacting with the comment kiosks. Of those who chose not to interact with the screens, beyond a minimal glance:

- Some said that they had not interacted with the screens because they 'didn't have the time' or 'were not interested': *"I've got too much else to see, especially as a tourist"* (F, 35-44). (This was supported by the visitor survey, in which 32 per cent of respondents in IWM London and 19 per cent in IWM North said that a lack of time was their main reason for not using the screens).<sup>17</sup>
- Some older respondents perceived that the screens were 'not for them' – that is, aimed at children or young people more interested in technology: *"It's for young people, not for people of my generation"* (M, 55+).
- Several interviewees said it was not clear at a glance what the screens were for (and, by extension, that they were unwilling to take the time to investigate) – see Exhibit 1 for an example of a screen in context.
- One or two felt that the interface looked overly complex and 'too much like hard work'.

Of those who decided to investigate the screens but did not leave a comment, several claimed that they 'had nothing to say' (independently of the fact that many of these same visitors were willing to share ideas and opinions with their friend or partner). Also, visitors were unsure of the audience for the comments, and there was a general view that the proposition was insufficiently compelling:

- The comment kiosks in IWM London contained two questions directed at visitors – one that acted as a heading; the other designed to prompt a response (see Exhibit 13). Unfortunately only a small number of comments (18.2 per cent of IWM North compared with 9.2 per cent of IWM London) were direct responses to the question prompt, and only a few survey respondents (9 per cent in IWM London, and none in IWM North) claimed to have 'thought about the question asked by the museum'. Most interviewees did not notice the prompting question spontaneously, and felt that the layout was unclear and that some of the questions were uninteresting. The differences between the two locations may be explained by the fact that IWM North kiosks were simplified down to one screen, following visitor feedback and experiences at IWM London.
- In some cases, especially in IWM London, the object with which the screen was associated was felt to be insufficiently interesting to merit a comment (see Appendix 9.1 for a list of objects that had comment kiosks associated with them).
- Most visitors felt that the majority of existing comments on the screens were banal and childish, providing little incentive to read many of them or spend time formulating one's own (this view was reinforced in the focus groups, where participants were given more time to read a selection of comments and offer their views: *"It's quite cool – I like interactive stuff. But the comment thing seems a bit pointless. The comments themselves are boring"* (F, 20-29).) There is also further evidence to support this if we consider the nature of repeated comments as shown in Exhibit 14.

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<sup>17</sup> Base: Noticed but did not use comment kiosks: IWM London = 23, IWM North = 28

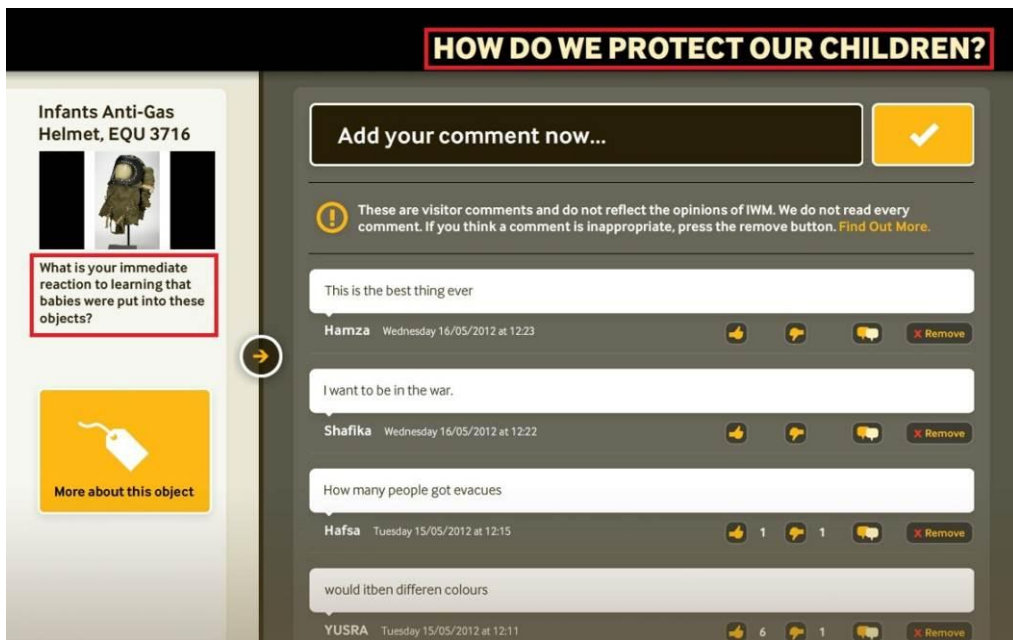


Exhibit 14: Illustration of the two questions asked by comment kiosks in IWM London

NB: Words and phrases are spelt and capitalised exactly as they appeared on the kiosk

Cool	344	Scared	39	I like it	20	:)	14	I love this place	11
Hi	264	Epic	37	I love it	20	Its cool	14	Its good	11
Lol	100	No	34	Run	19	Love it	14	Very interesting	11
Hello	96	Scary	34	So cool	18	H	13	Creepy	10
Yes	89	Sad	33	Interesting	17	Bad	12	Fab	10
WOW	87	Very interesting	33	It is cool	17	Gay	12	Happy	10
Amazing	79	Poo	32	Weird	17	I	12	It is amazing	10
Awesome	70	Omg	29	Boring	16	Brilliant	11	It is good	10
Good	66	Very good	29	Ok	16	Cool!	11	Same	10
Nice	47	Interesting	27	Fantastic	15	Funny	11	This is epic	10
Awsome	41	Hey	26	Sick	15	G	11	Yolo	10
This is cool	40	I like trains	23	This is amazing	15	I agree	11		
Great	39	Yo	23	Wicked	15	I like this	11		

Exhibit 15: Most common repeated comments from the kiosks, with the number of times they were found

The quality of the comments diminished the value attributed to them by visitors but importantly, it also inhibited other visitors from commenting themselves: *“I didn’t comment because I looked at this and I thought people weren’t taking it seriously”* [M, 35-44, North, Walking Interview). Interestingly, this respondent also identified a mismatch between the technology being used to capture social interpretation, and those most likely to be able to provide meaningful comment on the objects: *“But I think, with this type of technology now, the people who would maybe take it more seriously and leave more of a comment is the wrong generation. Like my mum and dad probably would, but my mum probably wouldn’t know how to work it. Where us, for example, would probably just like put something on Facebook, and it’s like “oh, I’ve made a difference”.*

#### 4.2.1.2 QR codes, app and web site

Evidence relating to the QR codes, app and web site is more limited. At the time of the visitor survey, the app had not yet been launched, and the QR codes had not been put in place in IWM North. As a result, it was not possible to generate data regarding their awareness or usage of these elements of the SI project via this route.

However, IWM analytics data<sup>18</sup> informs us that only 183 people downloaded the app between its release on the 4<sup>th</sup> September 2012 and the end of October 2012.<sup>19</sup>

In IWM London, the QR codes in Family in Wartime were scanned using either a generic QR code reader or the ‘Scan and Share’ app 715 times between 16<sup>th</sup> April and 7<sup>th</sup> November; of these 523 were prior to the launch of the app. This is equivalent to 0.1 per cent of visitors to IWM London between those dates (515,130) scanning a single code. Additionally there were 185 page views of the mobile web pages associated with the QR codes in Breakthrough Art for the period 18<sup>th</sup> September to 8<sup>th</sup> November.

<sup>18</sup> All views of these pages were on the mobile subdomain; the “ctx” part of the URL guarantees that the URL is not accessible by regular website visitors. With one exception they arrived directly, although whether that means through the app or having been shared and then accessed via other apps e.g. Twitter is unknown. The one exception is that someone linked to the World Trade Centre Steelwork from a website and generated 12 views.

<sup>19</sup> A percentage (approx 10-15 per cent) of these downloads will have been made by IWM staff and researchers

Most views of the object pages associated with the QR codes were unique views via different devices and did not lead to further exploration of other pages leading from the landing page (Exhibit 15 and 16). There were 446 page views of the mobile web pages associated with the QR codes in IWM North between 1<sup>st</sup> September 2012 and 8<sup>th</sup> November 2012, which could be equivalent to 1 per cent of visitors to IWM North in this time (49,792) each accessing a single page.<sup>20</sup>

<b>IWM London</b>						
	<b>Page Views</b>	<b>Unique Page Views</b>	<b>Entrances</b>	<b>Bounce Rate per cent</b>	<b>per cent Exit</b>	
<b>We Are Making A New World</b>	29	13	10	30.00	20.69	
<b>Travoy's Arriving with Wounded at a Dressing-Station at Smol, Macedonia, September 1916</b>	23	23	23	69.57	69.57	
<b>Ypres - Le Musee Apres le Bombardement de 1914-1917</b>	19	13	6	0.00	0.00	
<b>The Ypres Salient at Night</b>	19	19	10	60.00	84.21	
<b>'Feeds Round!' Stable-time in the Wagon-lines, France</b>	19	19	16	81.25	84.21	
<b>The Mule Track</b>	13	13	3	100.00	76.92	
<b>American Troops at Southampton Embarking for France</b>	13	10	10	60.00	76.92	
<b>Victoria Station, District Railway</b>	10	10	6	50.00	60.00	
<b>A Black Aeroplane on a Red Deck : Aircraft massed on the Flight Deck of "HMS Formidable"</b>	10	10	3	100.00	100.00	
<b>A Mine Crater, Hill 60</b>	6	6	6	50.00	50.00	
<b>Brigade Headquarters: Signallers and Linesmen</b>	6	6	6	100.00	100.00	
<b>The City : A fallen lift shaft</b>	6	6	3	0.00	0.00	
<b>Sappers at Work : Canadian Tunnelling Company, R14, St Eloi</b>	6	6	6	50.00	50.00	
<b>The Menin Road</b>	3	3	3	100.00	100.00	
<b>In Billets, Winter: Rations Up</b>	3	3	3	100.00	100.00	
<b>Total</b>	185	160	114	62.28	58.38	

Exhibit 16: Usage of mobile web pages associated with IWM London QR codes

<b>IWM North</b>						
	<b>Page Views</b>	<b>Unique Page Views</b>	<b>Entrances</b>	<b>Bounce Rate per cent</b>	<b>per cent Exit</b>	
<b>The Crusader</b>	165	152	139	74.82	73.94	
<b>World Trade Centre Steelwork</b>	65	57	52	92.31	87.69	
<b>British Army Biscuit</b>	52	48	35	74.29	75.00	
<b>The Empire Needs Men!</b>	48	35	22	59.09	45.83	
<b>Trunk</b>	39	30	13	100.00	43.59	
<b>Hand-propelled Invalid Tricycle Carriage</b>	26	22	17	52.94	34.62	
<b>Respirator, Anti-gas, Civilian Small Child's 'Mickey Mouse'</b>	17	17	9	100.00	76.47	
<b>WE 177 Type B (950lb), Training (Bomb)</b>	17	17	13	69.23	52.94	
<b>Section of Berlin wall</b>	17	17	9	44.44	52.94	
<b>Total</b>	446	395	309	76.05	66.59	

Exhibit 17: Usage of mobile web pages associated with IWM North QR codes

<sup>20</sup> The IWM are unable to identify whether visitors accessed the pages directly through the app or via other apps (e.g. Twitter) following sharing.

## Awareness and usage

The evidence of the walking interviews and staff interviews reflects and explains this low level of usage of the QR codes. The researchers initially allowed walking interviewees to engage with the galleries in their own way, to allow for natural observation. None of the respondents across both locations showed any spontaneous interest in the codes during the walking interview, or made any attempt to investigate them.

When prompted, almost all the respondents in IWM London *claimed* that they had noticed the QR codes while walking round the Family in Wartime exhibition (though, in at least one case, subsequent questioning suggested that this was not strictly true). In IWM North, few respondents claimed to have noticed the QR codes while in the gallery. In addition, only two of the ten staff members interviewed said they had seen any visitors using the QR codes.

One staff member highlighted the Breakthrough Art gallery in IWM London as the site of most interaction with the QR codes. This may be because the codes in this gallery were more numerous, more prominent, and did not have to compete with other forms of interactive technology. Exhibits 2, 3 and 4 showed the varying placement of the codes.

Although the analytics data shows that a small number of people have downloaded the app and scanned the QR codes, we have little direct evidence of how visitors have interacted with these elements of the technology, given the limited interest shown by walking interview respondents.

## Barriers to interaction

The evidence suggests that, while the comment kiosks in the galleries generated a degree of interest and usage, at least amongst certain audiences, interest in the QR codes and app was negligible. It is important to note that the app launched at a relatively late stage of the project, and has therefore had limited time to gain awareness.

Participants in the walking interviews and focus groups identified a number of specific barriers to adoption:

- The QR codes are discreet, particularly in IWM London, with limited labelling and signage that did not always explicitly indicate a method of scanning (see Exhibit 17). Although most respondents in IWM London said they had noticed them, none had read the accompanying label or felt clear about what would happen if they scanned the codes. It is worth noting that in IWM North, the most popular mobile page accessed to date is that for a piece of artwork, 'The Crusader', a seven-metre-high, three-dimensional structure covered with a web of war-torn buildings, which recorded 165 views. Here the QR code is particularly noticeable, and this may well also have contributed to its popularity (see Exhibit 18).
- A significant proportion of visitors simply lacked the necessary technology to take advantage of the codes and the app – i.e. a smartphone with QR code reader, or an iPhone to download the Scan and Share app.<sup>21</sup> This barrier is obviously unavoidable for the museum, but nonetheless has the potential to significantly reduce the target audience for the QR codes,<sup>22</sup> compared to the comment kiosks.
- Even visitors who did have smartphones had only limited familiarity with QR codes – most were aware of their existence and understood that one was meant to scan them with a phone, but only two or three had ever done so before. This unfamiliarity seems to have discouraged visitors from exploring further after noticing the codes – especially in the case of older visitors – and may have been exacerbated by the limited labelling and signage.
- Several visitors expressed a concern about possible technical challenges – these included poor phone signal in the museum, or the cost involved in using a 3G data plan to access the internet

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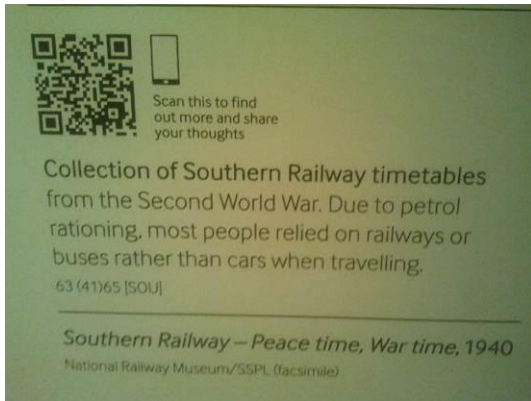
<sup>21</sup> The Android version of the app had not been launched at the time that we conducted the research

<sup>22</sup> Smartphone penetration in early 2012 stood at 39 per cent in the UK, according to Ofcom's latest *Communications Market Report*



(especially for international visitors). Almost no visitors were aware that both IWM London and IWM North offer free WiFi.

- A few visitors, especially in the Family in Wartime exhibition in IWM London, felt that the objects with the QR codes were relatively uninteresting, and therefore did not inspire them to go to the effort of finding out more.
- A small number of visitors felt that the app in particular (more so than the generic QR code scanner) represented an overly complex proposition: if they wanted to know more about an object, they would simply Google it; if they wanted to capture or share it, they would do so via a camera and email or Facebook, without a need for intervention by the museum. This raises questions about the proper balance between encouraging and facilitating existing behaviours, and seeking to replace them.



Take the biscuit?



1. Download our free IWM Scan & Share app from your app store.
2. Scan this code to join the discussion.
3. Add your comment and read others.



Exhibit 18:

Different types of QR code labels in IWM London and IWM North



Exhibit 19: *The Crusader* by Gerry Judah in situ at IWM North

#### 4.2.2 What evidence is there that the SI technology increased levels of engagement amongst visitors?

One of the key aims of SI was to increase the engagement of visitors by creating new opportunities for interaction and encouraging them to think about the museum and its collections. There is some evidence from both the quantitative survey and the qualitative interviews that the SI technology did increase levels of engagement.

##### 4.2.2.1 The comment kiosks

Observation of behaviour in the galleries, and interviews with staff members, points to a degree of 'buzz' and social interaction amongst visitors as they discover and interact with the comment kiosks, although this seems to be limited primarily to children and some young adults.

The personal experiences and recollections seen in some comments suggest that a number of adults made contributions, and we can suppose that those who did so were more engaged by the object in question and perhaps by the exhibition overall. Since the project did not involve qualitative research with visitors who had made comments themselves, it is difficult to make definitive statements about the extent or quality of this engagement. However, the quantitative survey data does provide some evidence, with 61 per cent of those who used the screens in IWM London, and 33 per cent of those in the IWM North saying that they had learned something, and 38 per cent of IWM London users and 44 per cent of those in IWM North claiming that they enjoyed hearing others' perspectives. The differences between IWM London and IWM North here may be due to the different ways that information was presented on the screens.

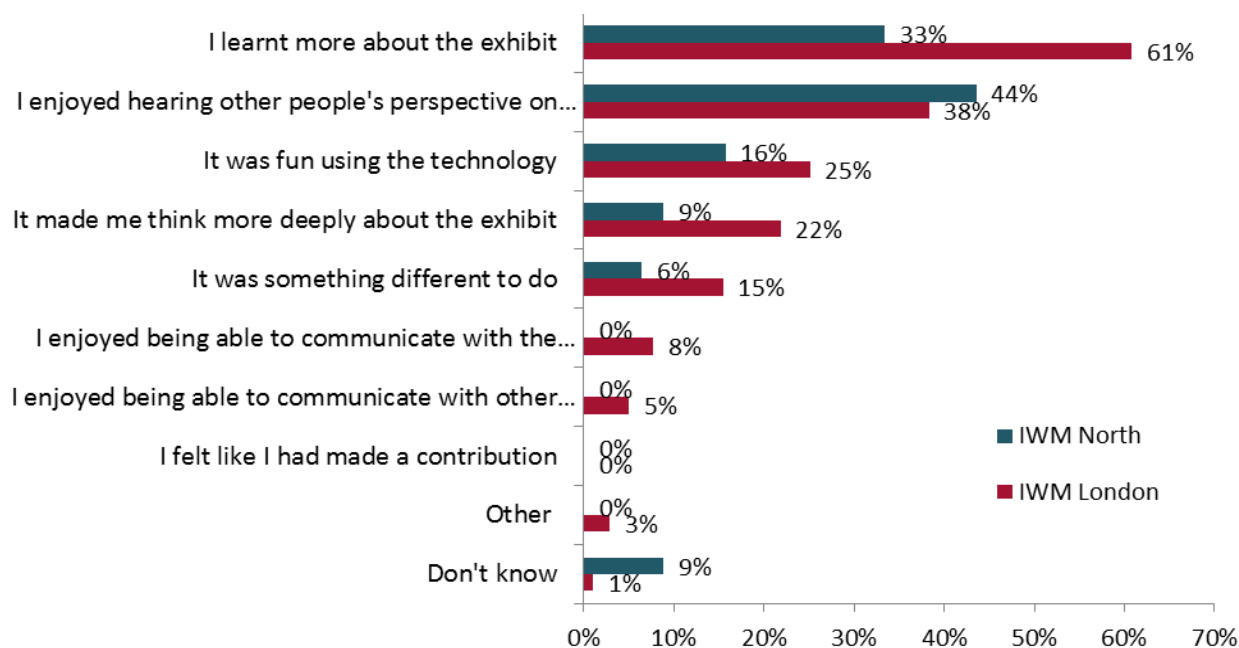


Exhibit 20: What users of the comment kiosks enjoyed about interacting with them<sup>23</sup>

There was a difference among the kiosk users in that respondents visiting with their families were more likely to explain that the kiosks provided 'something different to do' than the non-family respondents. We noted that family respondents to the visitor survey tended often to be visiting IWM for their children's benefit, rather than their own, giving reasons for the visit such as in order to 'encourage the children to take an interest in history', or to 'stimulate the children's imagination'. It seems possible that many of the family respondents were interested in the kiosks as a distraction or as an alternative to

<sup>23</sup> Survey participants were prompted with a range of possible responses, and were able to select more than one. Base: IWM London users of comment kiosks = 55; IWM North = 28

the other types of exhibits on offer, because they were not quite as interested personally in the subject matter of the exhibitions. Family respondents to the visitor survey tended to be the mothers of the family, present with children typically aged 5-15 years old. We therefore feel that the kiosks may have a twin role for families: engaging children, and engaging their parents.

The survey suggests that visitors did feel engaged by the screens in a number of ways, although it should be noted that the questions were asked only of the 55 per cent in IWM London and 34 per cent in IWM North who reported as having used the screens, thus giving rise to selection biases in the responses. The walking interviews with visitors provided relatively little evidence of natural engagement, because only a handful of respondents spontaneously investigated the screens and, of those who did, most felt that too many of the comments were banal or irrelevant for the experience of reading them to be interesting.

Taken together, these findings imply that for a minority of visitors, the presence of interactive technology in a gallery can increase engagement, whether by providing more information and stimulating a learning experience, or prompting reflection and a deeper consideration of the objects in the gallery. However, for a majority of visitors, the option to comment or see what others have written is not in itself appealing – and for some, the presence of a screen in itself is unlikely to prompt any further exploration.

#### 4.2.2.2 QR codes, app and web site

As none of the walking interviewees chose to spontaneously interact with the QR codes or download the app, there is no direct evidence of any increase in natural engagement resulting from the presence of these elements of the SI technology. One staff member believed that some visitors were spending a longer amount of time in the Breakthrough Art exhibition in IWM London as a result of interacting with the QR codes, but this is not conclusive evidence in itself.

Some users of the web site had chosen to create (curate) sets of their favourite objects, as well as leave comments, suggesting a higher degree of engagement with the museum and its collections. However it is not clear what this engagement entails when we refer to the collection of objects; none had provided a narrative which might explain why they had made the sets (even though the functionality exists for such narrative). Moreover, even where such activity happens, it is difficult to find the sets on the site (even when a user is logged in), so there was little opportunity for interaction with other visitors. Further work to understand such user-led curation is required.

#### **4.2.3 What motivates people to comment and share via the SI technology? Does doing so engender a sense of connectedness with the museum or other visitors?**

***Part of the aim of the SI project was to “enable users (on-site and online) to augment, collect, share, and interpret cultural experiences”<sup>24</sup>, by allowing them to offer their own opinions and perspectives of objects in the museum’s collection. Our research sought to understand what motivated visitors to do this, and whether it increased their sense of connectedness to the museum, the objects in it, or other visitors. There is evidence that, in places, the technology did achieve this goal. However, the research also suggests that museum audiences have profoundly mixed views about the desirability of engaging with fellow visitors, particularly given concerns about the quality of comments throughout.***

##### 4.2.3.1 Motivations for commenting and sharing

From an analysis of the comments themselves, as well as the walking interviews and focus groups, it is possible to draw some conclusions about the reasons for visitors choosing to share their views via the comment kiosks and app. As noted above, most of the comments fell into a number of broad categories:

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<sup>24</sup> IWM, Project proposal, 2011

responding to the object or question; directed towards the museum or exhibition; or irrelevant and/or banal. It is likely that the motivations for commenting differed for each of these categories.

- Some 'on-topic' comments involved an opinion or reflection; in others commenters offered a piece of information, whether from personal experience or general knowledge. For both these types of comments, the motivation seems to have been a genuine desire to share a personal statement about the object in question with other visitors. Participants in the walking interviews and focus group echoed this to an extent, although most were of the view that they would only be motivated to comment if they had some particular expertise or life experience (whether their own or a relative's) to draw on, rather than simply an opinion. One or two said that they would be particularly likely to make a comment if there was a gap or error in the current information provided that they felt they could rectify.
- In the case of comments directed at the museum or the exhibition, the nature of the comments suggested that some visitors treated the screens as a form of electronic visitor book. We can assume that some people were prompted by their enjoyment of their visit to share their view with the museum (rather than with other visitors per se). In other cases, visitors may have wished to interact with the comment kiosks and, finding themselves unsure of what to say, resorted to a generic expression of positive sentiment.
- Our observations of the workings of the museums, and our analysis of the language enrolled in comments led us to believe that many, though by no means all, of the irrelevant and banal comments were left by children and those in their early teens. Our observations of the museum space point to them having had a desire to play and experiment with the technology, rather than to share views with other visitors or the museum.

#### 4.2.3.2 Engendering a sense of connectedness

##### 4.2.3.2.1 *The comment kiosks*

###### **Connectedness to the museum**

A significant number of comments posted via the SI screens in IWM London and IWM North expressed a positive response to the museum and the experience it offers. Although many of these comments were banal (e.g. *"Great museum"*; *"I love this exhibition"*), some were more considered (*"I love the insight the Imperial War Museum gives you into the war and how hard it must have been"*). Although this sort of commentary was not the intended output of the SI project, which aimed to encourage interpretation of the exhibits themselves, in most cases it seems to express a genuine sentiment, and suggests that visitors do feel connected to the museum. Here we see how the kiosks were a prime mediator and partner in engendering connectedness between visitors and the museum. The kiosks engaged some visitors, merely by their existence as material objects in the museum space, and then working with the visitor and the museum as a further actor resulting in a response which was neither about the object generally or a response to the prompt question positioned on the kiosk screen. In such cases we see the experience of the overall museum, working with the kiosk and the visitor, more strongly than anything else in the immediate surroundings such as the object associated with the kiosk or other objects nearby. This usage of the screens was to some extent reflected in the walking interviews. When asked about the purpose of the screens, a small number of visitors seemed to assume that the main aim of the screens was to encourage feedback and comments directed at the museum, likening them to visitor books or comment cards. We believe this is because the question-and-answer model underpinning the service was not clearly laid out on screen, and was therefore not noticed by most respondents.

###### **Connectedness to the objects**

A significant proportion (31.7 per cent) of the comments left by visitors on the screens did relate to the object in question – albeit sometimes tangentially. In some circumstances these comments suggested that such an engagement had increased their sense of connectedness both to that object and to the exhibition or museum in general. For example, a visitor to IWM North, in response to the question "How

would you feel if you had to fire this gun?” placed on a comment kiosk next to a field gun, wrote: “*I would feel scared because I might shoot my own people*”. These sorts of comments suggest that for some visitors, the invitation to offer their perspective encouraged them to relate to the collection in a more personal way. According to the survey, 22 per cent of users of the screens in IWM London were prompted to think more deeply about the exhibit by the comment kiosks, although in IWM North this was only 9 per cent.<sup>25</sup>

Some participants in the focus groups and walking interviews recognised that being able to engage in a conversation or discussion around particular objects – by reading as much as by commenting – might increase their sense of connectedness with those objects, especially if there was an opportunity to ask questions and have these answered. However, in general respondents felt that the current execution of the concept for the comment kiosks did not deliver a sufficient volume of relevant comments to enable an engaging discussion or dialogue. In addition, one or two interviewees expressed concern that the need to focus on a screen might actually distract the visitor from looking closely at and thinking about the actual exhibits on display.

### **Connectedness to other visitors**

One of the aims of SI was to enable connections between visitors, encouraging them to share perspectives and interpretations in parallel to (or competition with) the traditional interpretation offered by the museum.

As noted, changes to the implementation of the technology during the course of the project meant that the in-gallery screens were not linked to the mobile and online aspects of the service. Nonetheless, by commenting on the screens, visitors were able to communicate directly with the wider museum audience. In addition, the screens enabled visitors to respond directly to another comment, as well as simply posting their own.

There is evidence that for at least some visitors, reading what others had to say did help them feel more connected with the museum’s audience: according to the visitor survey, 38 per cent of users in IWM London and 44 per cent in IWM North said that the main thing they enjoyed about the kiosks was hearing other people’s perspective on the exhibit.<sup>26</sup>, suggesting that there is a desire amongst museum audiences to hear other voices beside the museum’s own.

While there is little evidence that the comment kiosks did engender genuine dialogue between visitors, with only 1.2 per cent of comment contributions being categorised as displaying some form of attempt to engage, it seems reasonable to suppose that, where visitors left a relevant and considered comment on one of the screens, this was motivated at least partly to share their thoughts with fellow visitors.

This finding receives support – but also important qualifications – from the walking interviews and focus groups. Participants were divided as to the potential of the service:

- A slight majority of interviewees and focus groups participants had a reasonably positive stance towards the concept: they felt that they would be interested in hearing from fellow visitors – but only certain types. The most frequently cited were visitors with personal experience of the period or events in question, especially if this was first hand, with interviewees suggesting that this gave a greater degree of credibility and interest to comments and statements. A smaller number said they would like to hear from people with expert knowledge of the subject, such as historians or archivists. One or two said they would be keen to read comments from ordinary visitors, provided these constituted “*interesting responses to an interesting question*”.

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<sup>25</sup> Base: Used comment kiosks: IWM London = 55, IWM North = 28

<sup>26</sup> Base: Used comment kiosks: IWM London = 55, IWM North = 28

- However, a significant minority claimed to have little or no interest in hearing from other visitors, giving variations of the response: *“We don’t care what other people think”*. Some explicitly said that it was the voice of the museum they valued, not other visitors: *“I come to a museum to learn – I want the experts to tell me about things”* (M, 35-44). These respondents were also likely to say that they had no interest in sharing their own opinions, with several claiming that they were not *“the sort of person”* who comments publicly on matters: *“I’m generally not one to comment on things. I’d keep it to myself or comment to the person with me”* (F, 20-29).

Almost all participants felt that the majority of the comments on the screens as currently executed were uninteresting – based on an initial view of the screens in the galleries, or reading a representative sample in the focus groups – which led them to question the rationale for implementing the technology. Importantly, when talking about what would make for an engaging comment, participants did not seem to draw a strong distinction between statements from other visitors and statements from people speaking, as it were, ‘on behalf of’ the museum. For example, some in IWM London cited the War Stories exhibit, with its personal stories from soldiers returning from Afghanistan, as a desirable example of ‘other voices’. That is, although many visitors seem to welcome the idea of hearing from a wide range of sources, one of which may be ordinary visitors, for some what matters is the content and credibility of the material rather than the opportunity to form a connection with other visitors per se.

#### 4.2.3.2.2 *The app and web site*

There is little evidence that, since their launch on 1 September 2012,<sup>27</sup> the app and website encouraged users to form connections with the museum or the objects in its collection. A small number of people had used the website to create sets of their favourite objects, indicating a degree of interest and connectedness. A minority of participants in the walking interviews and focus groups, particularly students and parents, had felt that the ability to collect and share certain objects could be appealing in certain circumstances. Specifically, if the object was one that the visitor had a special interest in, then the QR codes might offer a welcome way to save a record of it, potentially to allow for further investigation outside the museum. One or two interviewees were interested in the ability to capture objects through app or QR code scanner because doing so would allow them to show others what they had seen.

At present the barriers to interaction, as discussed earlier in this report (section 4.2.1.2), appear too great to encourage widespread use of these technologies.

There is also limited evidence that the app or website had succeeded in facilitating connections between visitors, potentially due to a combination of the ambivalence towards hearing from other visitors discussed above, and the barriers to adoption of the technology referenced earlier in the report. Participants in the focus groups cited as a particular challenge the fact that it was unclear from the app’s interface what would happen to any comment they made – that is, whether anyone would read it, and whether they would be museum staff, other visitors, or simply online browsers. Coupled with the lack of existing conversation and discussion via the app, this uncertainty seems likely to have inhibited commenting for users of the service.

Despite all this, the concept itself appeared to have some potential. As with the comment kiosks, a small minority of respondents could envisage hypothetical circumstances in which they might be encouraged to share comments or objects via the app and web site – if the object was one they were interested in, or there was an opportunity for discussion with other informed individuals. Almost all agreed that, as currently executed, the service did not seem to facilitate this.

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<sup>27</sup> Data was only available for the period of launch 1 September 2012 to our cut of data for evaluating the project, 8 November 2012.

#### **4.2.4 How did SI affect people's enjoyment of the museum and propensity to recommend it to others?**

***Overall, most visitors appear to be positive or neutral about the implementation of the SI technology. There is evidence that, in some cases, it has increased people's enjoyment of the museum, and perhaps made them more willing to recommend it or consider returning themselves. However, this evidence must be treated carefully.***

##### **IWM London**

Visitors to IWM London that took part in the walking interviews were almost all positive about the museum experience as a whole, as well as the likelihood of recommending it to others: importantly, there was no discernible change following the introduction of the technology. This is compatible with the findings of the visitor survey, which show that overall satisfaction with visits to IWM London has remained stable year-on-year, with 56 per cent of respondents claiming to have had an 'excellent' visit in Q2 2011, compared to 57 per cent in Q2 2012 after the screens were introduced. The proportion of visitors who 'definitely will' recommend the museum to friends and family also remained broadly stable, increasing two percentage points from 75 per cent at the same point last year to 77 per cent in Q2 2012.<sup>28</sup>

However, when looking only at family visitors, we can see a significant increase in satisfaction, with 78 per cent reporting an excellent visit in Q2 2012 compared to 53 per cent in Q2 2011.<sup>29</sup> Of course, it is not possible to attribute this directly to the implementation of the SI technology, and there are definitely other factors at work. Q2 2012 involved a free family exhibition at the IWM (Family in Wartime), compared to a paid family exhibition in 2011 (Once Upon a Wartime), and conversations with IWM staff suggest that the presence of a free exhibition would significantly improve family satisfaction.

However it is notable that the Family in Wartime comment kiosks in particular do seem to have been popular with children, and that families interviewed during the walking interviews emphasised the benefits of having ways to engage young people in the museum. One or two suggested that the screens might constitute a specific reason to revisit the museum, when their children were older or could bring friends, and others simply implied that the screens contributed to their overall perception of the museum as a good place to bring children.

Moreover, when looking specifically at Q2 2012 visitors who interacted with the screens, we see a clear uplift in satisfaction. Seventy-nine per cent of visitors who used the screens claimed to have had an excellent visit, compared with only 41 per cent of those who did not use the screens. This suggests that for a significant proportion of visitors – and perhaps families in particular – the SI technology had improved their experience of IWM London. Conversely, interviewees for whom the screens had no interest were by and large happy to ignore them, and did not feel that they would diminish their experience.

##### **IWM North**

The evidence is less clear for IWM North. Firstly, overall satisfaction with the museum amongst all visitors was a little lower than in IWM London: during the focus group and walking interviews respondents identified certain negative aspects of the experience (at both pre- and post-stage), including the lighting, what some thought was a confusing layout, the lack of clear signage, and the

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<sup>28</sup> Base: All IWM London visitors: Q2 2012 = 205; Q2 2011 = 340

<sup>29</sup> Base: IWM London family visitors: Q2 2012 = 47; Q2 2011 = 103

congestion in certain parts of the exhibition hall.<sup>30</sup> This latter point was endorsed by the IWM’s visitor footfall data which confirmed that August 2012 was the busiest on record.

In contrast to IWM London, overall satisfaction rates reported in the IWM North visitor survey fell between Q2 2011 and Q2 2012, from 53 per cent to 43 per cent,<sup>31</sup> and this was also true amongst family visitors. However, there is no evidence from any of the research methodologies that the introduction of the kiosks caused the decrease in satisfaction. It is our view, following discussions with the IWM and from analysing the visitor survey data that these decreases were driven chiefly by the congestion in 2012 (which would have affected the quality of experience for a number of visitors), and the strong performance of the 2011 summer exhibition (War Correspondent, reporting under fire since 1914), which was not repeated in Q2 2012.

As with IWM London, qualitative interviews with staff and visitors suggested that the comment kiosks in the main exhibition space at IWM North do seem to have been popular with children, and again families interviewed during the walking interviews stressed the advantages of having a range of interactive formats to engage young people in the museum.

There is even some evidence that the comment kiosks are associated with an increase in enjoyment, with 56 per cent of those who used them reporting an excellent visit compared to 31 per cent of non-users.<sup>32</sup> Exhibit 20 summarises the difference between the two locations.

	IWM London		IWM North	
	Q2 2012	Q2 2011	Q2 2012	Q2 2011
<b>Visit rated ‘excellent’</b>				
<i>Total</i>	57 per cent	56 per cent	42 per cent	53 per cent
<i>Family</i>	78 per cent	53 per cent	45 per cent	59 per cent
<b>‘Definitely will’ recommend</b>				
<i>Total</i>	77 per cent	75 per cent	76 per cent	81 per cent
<i>Family</i>	84 per cent	87 per cent	70 per cent	84 per cent
<b>Visit ‘much better than expected’</b>				
<i>Total</i>	26 per cent	32 per cent	22 per cent	42 per cent
<i>Family</i>	41 per cent	38 per cent	15 per cent	40 per cent

Exhibit 21: Visitor responses to museum visits, IWM London and IWM North<sup>33</sup>

It is difficult to make definitive statements about the reasons for this discrepancy between the two locations (in terms of the greater increase in satisfaction in IWM London), but possible factors which warrant further investigation include the greater number of screens in IWM London; the fact that these were all integrated into one exhibition, perhaps providing a more coherent experience; and the fact that the IWM London screens offered a richer level of detail and information thanks to their dual interface. Of course there many other factors which influence the quality of people’s visits and their propensity to recommend to consider, and as mentioned above, other museum exhibitions and elements of the experience seem to have played an important role in the year on year changes in satisfaction (as would be expected).

<sup>30</sup> However, it is important to acknowledge that Daniel Libeskind’s building and design was always intended to challenge visitor’s pre-conceived ideas of what a museum is, and how it should look  
<sup>31</sup> Base: All IWM North visitors: Q2 2012 = 111; Q2 2011 = 117  
<sup>32</sup> Base: Q2 2012 IWM North comment kiosk users = 28; Non-users = 51  
<sup>33</sup> Base: Total visitors: IWM London: Q2 2012 = 205, Q2 2011 = 340; IWM North: Q2 2012 = 111, Q2 2011 = 117; Family visitors: IWM London: Q2 2012 = 47, Q2 2011 = 103; IWM North: Q2 2012 = 39, Q2 2011 = 42



Alongside the impact on enjoyment of the visit, the implementation of the technology appears to have had some effect – not always positive – on people’s perception of the museum. Responses clustered around a few key themes:

- Some felt that a greater use of technology helped to make the museum more relevant to a younger generation (even if these respondents felt that the technology was ‘not for me’). Several interviewees were emphatic about the importance of children learning about the history contained within the museum, and were therefore inclined to be positive about anything that encouraged engagement: *“The more the better I think with you two isn’t it? Because everywhere they do remember where we have been in the past, it’s always the stuff they’ve done rather than what they’ve seen that’s made it stand out to them”* (F, 35-44, IWM North, Walking Interview).
- However, we also identified an important tension here in that, whilst the value and relevance of this technology for children was acknowledged, there was also awareness from visitors at both locations that this could lead to inappropriate use of the screens, and that this could hinder the use of the screens by adults: *“Yes. There’s a lot of interactive screens which are very good but you tend to find that kids mess about with them and you don’t use them for what they’re meant to be used for...Although to get a kid interested in a museum it’s a good idea, interactive, they need to be tactile don’t they”* (M, 25-34, IWM North, Walking Interview). This potential at times for ‘over-use’ by children, at the expense of adult interaction, was also identified through the staff interviews, with most interviewees raising this as an issue.
- Despite this, some visitors felt that encouraging this sort of participation was an important part of keeping the museum up to date, and recognised that it appealed to certain audiences: *“I personally don’t have any problems with this kiosk, I think they should be here, you know, it’s 2012, give people a chance to [have their say] as opposed to going ‘No I don’t like it we don’t want anyone commenting”* (M, 30-39, IWM London, Focus Group).
- The small minority who were actively negative about the presence of the technology were mostly concerned that it would distract visitors from the historical exhibits and educational content within the museum, and possibly even trivialise the meaning or function of the objects: *“for example my son he is ten years old likes thumbs down, he likes all this but he doesn’t sometimes recognise that things kill people. He is too young, for him this is cool so I think this is not a good way to show people this kind of thing, to show people that what you see now is not just cool kind of thing but something that kills people”* (M, 30-39, IWM North, Focus Group).
- Some visitors also worried that investment in new technology initiatives would have a detrimental impact on the museum’s spending in other areas.

#### **4.2.5 How does the SI technology fit into visitors’ existing social networks and social media activity?**

***As discussed in section 4.1.1, many IWM visitors are frequent users of social media, albeit not necessarily in connection with cultural activity. Through the walking interviews and review of usage of the app, website and comment kiosks, we assessed as far as possible how the SI technology fitted into users’ existing social network activity. We found that while SI did appear to tap into a variety of existing behaviours, in some places the service conflicted with rather than complemented social media usage.***

As section 4.1.1 suggests, there is evidence that some visitors are in general interested in sharing information and content relating to their museum-going and other cultural activity. However, the walking interviews suggested that most of the visitors who were inclined to record and share their experiences felt that the SI service was an unnecessarily over-engineered way of doing this. The screens differed from usual commenting contexts in that the audience was an unknown collection of visitors rather than the user’s social circle. Also, while the app and QR codes did in theory enable users to ‘capture and share’ objects, most felt that they would prefer to do this on their own terms via their

camera and Facebook or Twitter profiles.<sup>34</sup> At present, therefore, there is little evidence that SI is significantly altering or augmenting visitors' use of social media in this context. The evidence of the research suggests that, while there is the potential for museums to encourage and facilitate social behaviour around their collections, more work is required to identify ways of making this as easy and appealing as possible for visitors.

The research also explored the place of the IWM in visitors' 'offline' social networks – that is, the people they visit with and talk to about the museum. As would be expected, visiting the museum is for many people a social activity. This is reflected not just in the fact that people visit with friends and family, but also in the conversations that take place during those visits: it is important to emphasise that social interpretation takes place continuously within the galleries themselves, albeit in an informal and verbal form, through visitors sharing their thoughts, insights and expertise about particular objects. Some visitors explicitly said that if they felt they had a comment to make, they would make it to the person standing next to them rather than via a screen. One or two respondents appeared interested in the idea of extending this immediate circle through greater interaction and exchange with fellow visitors within the museum – for example, in the context of a scheduled talk or discussion about a particular subject. Social exchange with friends and family members also continues after the visit, with many saying they would tell others about what they had seen.

For most visitors, there appears to have been little incentive to transfer their existing social interaction and interpretation with friends and family to digital channels. Only a small proportion was excited by the possibility of sharing their thoughts more widely, and hearing from a broader range of other voices in return. As discussed above, this is partly a reflection of the usual distribution of participation. But it is likely that as experiments with social technologies in museums continue, new ways of encouraging interaction will be identified.

### **4.3 What are the challenges and risks of digitally mediated social interpretation?**

***The challenges and risks of digitally mediated social interpretation and cultural exchange as evidenced by the project can be conceptualised as relating to: reputation, risk and the cultures of crowds; resourcing; moderation practices; and the roles of non-human mediators. An underpinning challenge emerging from our analysis is the need to explicitly conceptualise and reflect upon what risk is, could be and should be.***

#### **4.3.1 Reputation, Risk and the Cultures of Crowds**

From the outset of the project a major concern of the project team was that the reputation of IWM could be harmed if the engagement of visitors was not managed appropriately. Therefore much effort was invested in interrogating the risks involved and this resulted in a model of moderation practice as discussed in the next section. Additional thought was also given to the selection of objects and the prompt questions associated with these. A number of the objects that IWM holds could, when presented to the public for comment, lead to dialogue that visitors may find distressing and/or deeply objectionable. Therefore, objects were sought that were conceived of as holding the capacity to act as a prompt for discussion, yet minimise the chances of generating deeply problematic dialogues and unwanted headlines in the media. Based on the analysis of the comment data, it appears that a good balance has been struck in this respect. There have been no incidents involving problematic dialogues to date, with very few of what might be seen as 'high risk' comments being made – the usage of racial slurs for example. Therefore at least, to date, it appears that this potential problem has not become one in reality.

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<sup>34</sup> It is worth noting that, strictly speaking, visitors to the Family in Wartime exhibition in London are not allowed to take photographs (although some do). In these circumstances, a simple QR capture mechanism may have more appeal as the only means of making a record of a favoured object

However, as part of our research we did engage our participants in discussion of notions of risk and the acceptability of dialogue imbued with risk. From this we identified that some participants believed that risky comments should be removed, for a number of reasons. For example, some participants thought that the museum space was not a place to have a debate about particular issues: *“You don’t go to the Imperial War Museum to have a debate about race, it is pure and simple, you take that out.”*

Others felt such comments should be removed because it would improve the experience for others, talking about risky comments as ‘clutter’ getting in the way of quality comments rather than items that should be removed because they were risky or offensive. Some participants conceptualised the problem as a difficult one to overcome recognising that visitors would have different interpretations of risk and what constituted offensive: *“I think people have different thresholds don’t they in terms of what they find offensive, different kinds of tolerance levels to different things. My view is when I read something like that I think ‘god’ but there are people like that.”*

Most participants seemed generally unconcerned about risk and were happy for all the comments to remain, although there was recognition that filtering would improve the experience. Furthermore, some participants actively defended the right of visitors to write what they wanted, feeling that this was part of the whole point of the exercise. Only a small minority believed that comments should be actively curated by museum staff.

However, the evidence suggests that one of the key problems with the project (hence, an unforeseen type of risk) has turned out to be a perceived lack of substance in comments made by visitors and the negative effect this has had on visitors’ experiences. Exhibit 14 illustrated the most prevalent repetitions of comments, which demonstrated a high degree of quite superficial engagement with the technology and, as one focus group member put it: *“from a museum on war you would expect stories and learning about how it felt to fire that gun, not 100 ten year olds who are ‘reppin their skool!”* (M, 20-29, IWM North, Focus Group).

**4.3.2 Moderation Practices**

Allied to concerns regarding the risks associated with the SI project was the challenge of how to moderate visitor interaction. A home grown profanity filter was developed, which automatically stopped comments containing banned words and phrases from being submitted. This filter contained an editable library of profanities which included whole words as well as disguised words that used characters such as ‘\$’ to replace ‘S’, ‘8’ to replace ‘bate’ and so on. However, the filter only restricts the text of comments, as a number of ‘visitor names’ containing banned words were found. The process of active moderation then involved IWM staff from the web team who responded to those comments flagged as inappropriate by other visitors.

Data on this activity, in respect of kiosks, is provided in Exhibit 21 and indicates that, overall, 39.1 per cent of all comments were flagged for moderation and of these 91.9 per cent were subsequently moderated as problematic (and thus removed from public view) but 8.1 per cent were reinstated (and thus returned to the comment stream on the kiosk in question). Overall, this meant that of all comments made via the kiosks in the project, 64 per cent remained in public following moderation. Additionally, from the table it can be seen that there was some unreported spamming / trolling.

	No. Made	No. Reported	No. Moderated as Safe	per cent Total Reported	Moderated as Problematic	per cent Reinstated	Post Moderation
Answer to Prompt Question	2551	814	161	31.9	80.2	19.8	74.4
Interpretation of Object Elsewhere in the Museum	525	152	27	29.0	82.2	17.8	76.2

Interpretation of Object in Question	3840	1233	153	32.1	87.6	12.4	71.9
Negative Comment about IWM	77	39	8	50.6	79.5	20.5	59.7
Positive Comment about IWM	1136	253	30	22.3	88.1	11.9	80.4
Possible Exchange	244	76	5	31.1	93.4	6.6	70.9
Question Posed by Visitor to the Museum	263	89	12	33.8	86.5	13.5	70.7
Intention Unclear	3751	1407	88	37.5	93.7	6.3	64.8
Spam and Trolling	6234	3352	55	53.8	98.4	1.6	47.1
Only Name Entered	1509	463	102	30.7	78.0	22.0	76.1
Grand Total	20130	7878	641	39.1	91.9	8.1	64.0

**Exhibit 22: Record of moderation levels and outcomes, for each category of comment (total data set)**

Further analysis of moderation outputs showed that the comments we had coded as displaying a degree of social interpretation were less likely to be flagged for moderation (30.8 per cent vs 39.1 per cent overall) and were also less likely to be subsequently moderated as problematic (85.1 per cent vs 91.9 per cent overall), meaning that more of them remained in public following moderation (73.8 per cent vs 64 per cent overall). These results are shown in Exhibit 22. Our coding was very inclusive, so it is no surprise that a proportion of the 'SI Evident' comments were reported and subsequently removed from public view, but the findings indicate that socially interpretative comments are less likely to be risky in visitors' eyes.

	No. Made	No. Reported	No. Moderated as Safe	per cent Total Reported	per cent Moderated as Problematic	per cent Reinstated	per cent Public Post Moderation
Answer to Prompt Question	2551	814	161	31.9	80.2	19.8	74.4
Interpretation of Object Elsewhere in the Museum	525	152	27	29.0	82.2	17.8	76.2
Interpretation of Object in Question	3840	1233	153	32.1	87.6	12.4	71.9
Negative Comment about IWM	77	39	8	50.6	79.5	20.5	59.7
Positive Comment about IWM	1136	253	30	22.3	88.1	11.9	80.4
Possible Exchange	244	76	5	31.1	93.4	6.6	70.9
Question Posed by Visitor to the Museum	263	89	12	33.8	86.5	13.5	70.7
Grand Total	8636	2656	396	30.8	85.1	14.9	73.8

**Exhibit 23: Record of moderation levels and outcomes, for each category of comment (SI comments)**

Our qualitative data suggests that, although visitors were aware that the 'remove' button signified an ability to delete or report a comment (usually perceived to be the former due to the use of the term 'remove' rather than report), visitors did not actually view this as an opportunity to engage in a process of moderation. However, the data in Exhibits 20 and 21 provides additional insights into the role of visitors as related to moderation practices. It is clear from the number of reported comments that a good proportion of visitors were happy to engage in processes of moderation and this potentially reflects the norms of social media familiar with the younger visitors who were the most frequent users of the kiosks.

This familiarity with social media among many of the kiosk users could also explain why a number of comments categorised as spam were not reported, as well as the distribution of likes and dislikes attached to the comments, shown in Exhibit 23. Of the likes and dislikes received, 1,490 (60.4 per cent) of 'likes' and 1,080 (61.7 per cent) of 'dislikes' were associated with comments that were either unclear or that we have categorised as unhelpful, indicating that it is not only the comments intended as social interpretation that actually provoke a response among other visitors.

	Fire Pump	Baghdad Car	Children's Anti-Gas Helmet	Evacuee Label	Field Gun	Fish Shop Picture	Make Do and Mend	Squadron Bug	Air Rifle Target	T-34 Tank	VE Celebrations	Total
Likes	766	967	925	1103	490	748	873	620	876	852	8220	
Dislikes	503	652	807	848	276	611	658	494	580	665	6094	
Likes (Reported)	256	391	269	246	243	249	216	107	288	201	2466	
Dislikes (Reported)	189	262	213	194	140	195	172	81	148	155	1749	

Exhibit 24: Levels of 'like' and 'dislike' response to each comment kiosk

#### 4.4 Does the use of social media models facilitate a re-balancing of the audience/authority relationship between visitors and the museum?

As part of the SI project, and in museums generally, one of the underlying aims of using social media, and in this case social interpretation, is to provide audiences with more of a voice, and to enable them to play more of a role in content creation. In so doing, it is argued, there is the potential to challenge the museum's voice of 'authority' and to enable the democratisation of knowledge. In fact, the findings from our qualitative data suggest that the majority of IWM visitors had limited interest in participating in content creation, that the existing comments were not sufficiently relevant to be able to transform or re-balance their relationship with the Museum, and that only a minority expressed a desire to change that relationship anyway. Most visitors and focus group respondents were content, at ease, and accepting of the Museum acting as the voice of authority. However, there was a significant minority for whom this was not the case, and who did express the need for, and the wish to hear other voices in the museum.

##### 4.4.1 Whether the use of social interpretation de-stabilises and challenges the authoritative voice of the museum

It is clear from the research that most focus group respondents and visitors identified the IWM as the voice of authority within the museum space, and that they did not see social interpretation as either posing a significant challenge to that, or as being able to de-stabilise it in any meaningful way.

This was because the majority of visitors and focus group respondents at IWM North and IWM London characterised the museum as an 'educator' whose role and function is to provide education, informed knowledge, learning, historical accuracy, an authentic trustworthy account of facts: "*Things that happened before you and I was born. It educates us, lets us know*" (M, 35-44, IWM North, Walking Interview). Consequently, for these respondents it was important that the museum did act as the voice of knowledge and authority, as that was what they expected from their visit. Furthermore, in general, the respondents did not think that the IWM voice was too dominant or over-powering at either IWM North or IWM London, and hence saw little need for it to be de-stabilised or challenged. Indeed, there was an acknowledgement that whilst it presented the 'facts' the museum did not make judgements: "*Yeah it is very factual, this is what this is, make your own judgement. It is not too prescriptive... It doesn't come across as preachy but as historical facts*" (M, 30-39 IWM London, Focus Group).

Additionally, and perhaps more significantly, social interpretation was not seen to pose a challenge to the voice of the museum due to the quality and type of comments that were left on the comment kiosks, many of which as we have seen in Exhibit 14 were trivial, banal, and at times even inane. This was recognised by many of the visitors: "*Some of the comments are a bit inane, some of them are flippanant, perhaps inane, is not the word. But I think it's wrong really for people to do that*" (F, 60-64, North, Walking Interview).

It seems that the nature of the comments militated against the construction of a narrative, or set of comments, or even a form of knowledge that might have challenged the voice of the museum. Hence, in the main, reading the comments didn't motivate visitors to comment themselves, nor did it give them access to extra information, or the opportunity to gain new knowledge and understanding with which to challenge the authorised museum text.

However it is apparent that, for a minority, having this added knowledge would have been a valuable addition to the museum experience. Especially, if the comments were able to add a missing piece of information or an extra detail, and so support the museum's interpretation. Additionally, one or two of our focus group respondents in IWM North and IWM London did suggest that where a piece of information was actually wrong, this could extend to correcting or challenging the museum's account. To add to this, it was also clear that for some visitors, interpretation by someone other than the museum might be of value if that person was perceived to have some expertise or to have something worthwhile to say: *"If it was an historian who had wrote on it or something like that, but no, not an everyday person. It wouldn't even be a reputable source"* (M, 16-24, North, Walking Interview).

Evidence of this was also found in the focus groups where, when tasked with scanning the QR code of the 9/11 Twin Towers steelwork, some of the respondents noted that they had been supplied with links to a range of resources, but were then rather disappointed to find that these were internal links to material held by the IWM: *"So there weren't any external things that you could then access about 9/11 because that might be quite interesting in terms of getting a different interpretation rather than just Imperial War Museum"* (M, 30-39 North, Focus Group).

Clearly, there is some appetite for other interpretations, or voices to be heard in the museum, but the way in which these comments were gathered and presented through the comment kiosks and app did not enable this to happen in a way that either satisfied the visitors, or enabled any real challenge to the authority of the Museum.

However, almost half of the focus group participants did see the comment kiosks as potentially destabilising the audience/authority relationship and the trust the visitor has in the value of the museum's representation of the past, but in a more unexpected, perhaps unintended way. These respondents looked to the museum as a reliable, trusted source of knowledge and provider of education. The museum's decision to install the comment kiosks and allow un-moderated comments upon them caused a few respondents to question whether the museum knew what it was doing, or could still be trusted: *"I just think for the sake of doing something like this, to maybe get banal comments and risk having offensive comments and then the museum presumably either has to or should employ someone to moderate them all. It seems a waste of money and resources to have someone go through this rubbish in case there is any swearing or Anti-Semitic or anything else that is offensive. I don't think it is worth it"* (M, 30-39, IWM London, Focus Group).

Furthermore, our analysis of the comments data (see Exhibits 12 and 14) has highlighted how there is some potential through the SI technology for visitors to express dissatisfaction with the museum, make negative comments, and to challenge and ask questions of the museum. Whilst this may not explicitly be about challenging the authoritative voice of the museum it does demonstrate that this technology can provide an outlet and a means by which visitors can have a voice, and a voice that has a public airing.

#### **4.4.2 To what extent is there evidence of the democratisation of knowledge through social interpretation?**

It is difficult to report on whether there is a democratisation of knowledge through social interpretation because so few of the respondents commented, or read the comments of other visitors. However, the comments data (Exhibit 12) does show some evidence of the potential for this to happen, with 39 per cent of the comments in IWM London and 49 per cent in IWM North being categorised as social interpretation. There is some sharing of information and opinion occurring, however, the degree to

which this is leading to the democratisation of knowledge is more questionable. For, as we have seen in Exhibit 14, many of the comments were banal, one or two word responses and it is hard to see how these would add a different dimension to a visitor's knowledge and understanding.

In spite of this a few respondents could see the benefits that there might be to social interpretation and the potential it may have, though others were more guarded in assessing the value of it, and the degree to which social interpretation extends and adds to, or makes knowledge more accessible and inclusive: *"If you are adding to people's knowledge base then yeah fine, a lot of the time you are not because people don't actually know and they may be coming into these places for the first time and going 'wow I never knew that'. And then other people like ourselves who have an interest in these things are going in 'well yeah I agree with that, that's fine and maybe we are going to learn something different"* (M, 60-64 IWM London, Focus Group).

There was however, some acknowledgement that being able to share your knowledge, or express your point of view, may be beneficial or even therapeutic for some individuals. A few respondents at both locations recognised that social interpretation did allow people to see the emotional impact an object might have had on an individual, however they were less convinced that this added to our knowledge or understanding of the exhibit or object, or whether this was the best way to comprehend the emotional impact, as one IWM London respondent noted: *"I am not sure one-liners or two-liners like this add much to people's knowledge. If you want to hear what somebody felt and went through then maybe either you hear their voice or you read their story"* (M, 50-59 IWM London, Focus Group).

Analysis of recent comments made through the website shows how accessing the collections online does seem to enable more extensive social interpretation, and prompt an emotional reaction to what can be commented upon and collected there: *"LQT C is my father. He sadly passed away years ago. Was just thinking about him tonight and happened to type his name on Google – bittersweet to see a record of him here but so sad no picture of him is shown. I miss him dearly. R.I.P."* (IWM, Website). We can also see some evidence of website users adding their own content: *"The man in the background behind Winston Churchill is my Grandfather, he was Works Manager of Vickers Armstong, Castle Bromwich for 20 years and then became Director for eight years before he retired. And also challenging the museum's account or interpretation: "My father was special services during ww2. – I think u will find this is not for tyres – ridiculous!!! – but to assist in garrotting instead of wire!!!"* (IWM, Website). This demonstrates that enabling social interpretation across the museum's digital platforms does provide an opportunity for users to share knowledge and information that benefits the individual sharing, and also potentially the wider audience.

#### **4.4.3 What are the audience's perceptions of these interpretations, how are they valued, what weight is given to them, whose voice is recognised, and what resources are drawn upon in this process of recognition?**

It was apparent that visitors were willing and open to hearing and reading other voices in the museum, especially if these voices had some 'authority' of their own: conferred by having expertise, specialist knowledge, or experience worthy of respect (especially 'first hand' experience). These voices were given particular weight if they enabled the visitor to learn or feel more about the object: *"The same with the gun, why isn't there a comment from somebody who shot this gun. You know like after they put the comment in you can say well so and so did and this is how they felt. You know and maybe that will put things more into context for people. And that is bringing it alive as well"* (F, 50-59 IWM North, Focus Group).

The use of 'experts' to provide commentary on the objects was seen as a useful way to add other voices, and make other interpretations available to visitors. In the extract below we can see that recognition of a person's standing (by a museum) and expertise (by the media) was used by the respondent as a resource with which to evaluate the status of this 'expert' and therefore his suitability to provide comment: *"I watched the 'Heroes of the Sky' series, I think it was on Channel 5 and it was narrated by*



*Michael Ashcroft who has an attachment to the Imperial War Museum and it was fascinating because it is his thing. So yeah hearing an expert talk about something like that, even though he has never flown in battle himself was fascinating” (M, 30-39 IWM London, Focus Group).*

The value attributed to interpretations by people who had ‘first-hand’ knowledge or experience of an object, or of the context in which that object would have been seen or used was significant: *“What I am saying is a comment from someone who had actually experienced one of these shells come at them or having to fire those shells” (F, 50-59 IWM North, Focus Group).* Respondents talked about how much more meaningful such interpretations would or could be, and how they could add an important dimension to their knowledge, understanding, and their experience at the museum. There was recognition that such interpretations could be particularly resonant *“because they are so powerful” (M, 60-64 IWM London, Focus Group),* and that in some ways it would enable people to enhance and augment the history that was being presented: *“Somebody could write “oh my father used to be a firefighter”, so that kind of thing. So you would actually almost add to history if you wanted to, to contribute” (BL 5, IWM North, Walking Interview).*

Significantly, a minority of our respondents wanted these ‘first-hand’ interpretations to be given the same, or almost the same, importance as the voice of the museum: *“And giving them almost the same value as the museum’s interpretation of it” (F, 40-49 IWM North, Focus Group).*

For some visitors there is a desire to engage in a dialogue with the museum, as a means to obtain information and knowledge above and beyond that which is on display: *“Yes if there was a way whereby ‘this is something that really interested me and I would really like to know’ and you could use it to ask a question which would be answered. But I don’t know how you do the technology for that. That then becomes interesting because, again it is a way of interacting” (M, 30-39, IWM North, Focus Group).* There is further evidence for this view demonstrated by the fact that 263 (3 per cent) out of the total of 8,636 comments made through the SI technology across both sites were categorised as ‘a Question Posed by Visitor to the Museum’ and 244 (3 per cent) comments were categorised as a ‘possible exchange’. A number of website comments also highlight this: *“What is this equipment? It looks like rockets. I have a log of my dad’s post (1944) at Portland, Dorset. Daily entries were ‘rocket charged’ and ‘circuit broken’. I’d like to know more details, what were the rockets for? Warning flares” (IWM, Website).*

Additionally, there is some evidence of a desire to provide both the visitors to the museum and the museum itself with greater information through the commenter’s social interpretation: *“Hello I was recently reading some of my late mother’s letters. She was born in Belfast in 1913, but I did come across a small leather JOURNAL in which a pencil day to day description aboard the ATHENIA in 1936 including breakfast menu and activities deck chair rentals tug of war etc.. I was wondering if at all possible it may be of some value to you in a history concept” (IWM, website).*

However, it was also evident that these conversations do not necessarily, or even preferably, have to be mediated by technology, as this respondent remarked: *“I would still rather there was somebody standing there that I could say ‘ooh that’s’ and ask a question of the person” (M,30-39, IWM North, Focus Group).* It was also clear that for the majority of respondents, this dialogue would be with the museum, rather than other visitors, who are seen to be *“not such an authority are they?” (F, 50-59 IWM London, Focus Group).*

Conversely, this desire to engage in conversation with the museum was not universally welcomed, with a minority of respondents challenging whether this is the function of a museum. Here the role of the museum as an educator is to the fore: *“I don’t know, if a museum says it has been researched and it is there for a reason, I think there is just more thought gone into it” (M, 20-29 IWM North, Focus Group).* There is a sense that for some, adopting this form of interaction decreases what Bourdieu (1984) would call the ‘distinction’ of museum visiting. It trivialises the experience of visiting the museum, reducing it to just another leisure experience: *“Isn’t that more like a tourist thing though isn’t it, would you see that*

*in a museum, someone initiating a discussion? You wouldn't go to a museum to discuss about something; you just go to see whatever you want to see. I don't want to be standing there interacting with someone" (M, 30-39 IWM London, Focus Group).*

Clearly, there is some appetite from certain parts of the IWM audience to have a closer, more engaged, relationship with the museum. This was particularly noticeable in the website users; however, we found limited evidence of the IWM participating in a dialogue with these users, either by responding to the question posed, or by commenting upon the content created. This may well be a resource issue but, for this to become meaningful, participation and dialogue then this matter would need to be addressed.

## **5 Reflections on the Process of Research and Development Projects in Arts and Cultural organisations**

The project has highlighted a number of issues and challenges that arts and cultural organisations face when conducting R&D. We reflect on these below:

- It is clearly beneficial to R & D projects in arts and cultural organisations if the project is 'bought into' at senior levels, and if all relevant departments/sites are 'on board' with the project. Indeed, it is important that, where possible, those leading the project from the arts and cultural organisation are empowered, and given the leeway, freedom and authority to innovate and make decisions.
- Alongside this it is important that the research component of the project is scoped at the outset so that requirements can be built into research contracts and project plans. Such requirements may vary project by project; however, it is key to the success and smooth running of the project that from the beginning the researcher's and the arts and cultural organisation's needs and expectations are clearly identified. However, there is also a need for flexibility and adaptability on the part of the researchers and the arts and culture organisation. The nature of R&D means that things can change quite quickly, for example in terms of what is possible. Such changes can impact upon such things as research questions, methods to be used and data analysis. There is therefore a need to be able to react quickly to changes to the project, but also to find the space to accommodate these in the project planning.
- Similarly, where a new audience proposition is being developed, it is always advisable to conduct audience research to inform the design of the proposition. Otherwise, there is the possibility that the proposition will be built by specialists in technology or in curation but may not be fit for purpose in terms of audience engagement. The research team is of the view that more audience research and, importantly, implementation of the findings from that research, in the developmental stages of the SI technology would have benefitted the project, and helped ensure that it delivered more successfully in terms of the degree and form of SI and user engagement.
- Evaluation as a process, rather than a one-off event, was key for the SI project, and our experience of the project saw us witness a continuous assessment in many areas as to the current position, particularly from a project management perspective. What is clear for this project, and potentially others, is the importance of embedding evaluation activity into digital media. Here the project deployed analytics software to generate data regarding such things as app downloads and numbers of comments. However, the complexity of these types of projects means that digital media engagement initiatives for arts and culture often need to go beyond bounce rates and traffic monitoring. Mechanisms to understand the dynamics of interpretation, exchange and engagement are required on a real time basis in order that adjustments can be made on the fly.
- Linked to this, the implementation of digital media based evaluation activity is not a simple matter of using software to analyse the data that digital media based interactions produce and create. Realistically, evaluation links with the need for resources of both people and digital. For instance, it is not helpful to know from digital media that an intervention is needed by personnel but not have the capacity to act, in as much as it is having the people to act in digitally mediated environments, but not knowing who with, how, or why they should be doing so. Evaluation is a key challenge for

arts and cultural organisations, particularly given financial pressures many increasingly face, both internally and externally.

- This issue of resourcing, and the risks involved if R & D projects are not adequately resourced, is something that needs to be addressed and considered at the outset, but that also needs to be continuously assessed throughout the life of the project. The SI project generated many interesting ideas for increasing audience engagement and reach, but these ideas may require considerable resource (in terms of staff time) for effective management and delivery. For example, moderating SI activity across a range of digital platforms was a considerable task for the IWM team, as it would be for any other arts and cultural organisations. Visitors did lend a hand by reporting inappropriate content, however, it could be suggested that some comments remained that should have been removed, and indeed some were removed that maybe should not have been (a particular example here were innocuous comments made in foreign languages). Alongside this there is also the risk of not delivering on audience propositions, such as not answering audience questions in a timely manner.
- Connected to this, arts and cultural organisations that engage in R&D projects often face difficult decisions about whether to develop their own technologies or to purchase existing systems (such as profanity filters/moderating systems). Developing in-house can lead to systems that may not be as advanced as those that audiences are used to seeing elsewhere, and that may be prone to early-stage design flaws that have been ironed out in existing systems. These tendencies are worth considering for future R&D projects, although of course there will always be a need to balance these considerations with cost and the desire for bespoke propositions.
- Organisations without such resources might want to think about engaging with ideas of open source software. Not only is such software often available on a free/creative commons licence, but implementation and maintenance can often be sourced for free also. Indeed, there is here an opportunity for large and small arts and cultural organisations to engage with such communities to contribute to, and benefit from the shaping of software products that are easily accessible and can be tailored the arts and cultural sector's needs.
- IWM had clear goals for its project – put simply, to engage people through digital media and have them socially interpret objects. In some cases, however, having such clarity can close off alternative pathways that a project may follow. One of these is assumptions about users and how they will engage with a product to be delivered to them. A particular flavour of this is the 'design fallacy' – a well-known concept in science and technology studies. The design fallacy refers to the idea that technological arrangements are pre-built and have a fixed idea of use which plays out as the designers intended. The problems of this view are that it rests on an assumption that designers can know in advance, and completely, what a user is and wants, and that users will not make the thing they are given work in ways the designer hadn't thought of. Thus, we saw in the SI project, visitors using the museum kiosks as electronic visitor books – instead of answering the prompt question, they commented, for example, about how great the museum space was or how pretty the object in front of them was. Users innovate at the local level as technologies are configurable, they do not remain as they were released 'into the wild' by designers. Such occurrences are not specific to the SI project – local/user led innovation does and will happen in other arts and cultural projects. The malleability of a set of arrangements may affect the extent to which this happens of course, but users (visitors) are adept at change. Arts and cultural organisations need to be aware of this, seek it out and capitalise on it, and find ways of resolving it, or indeed living with it.

## 6 Conclusions

The overall aims of the SI project were to explore whether applying social media models to cultural collections has the potential to increase audience engagement and reach and if social moderation is an effective response to the challenges posed by representing public comment and discussions in physical and digital cultural spaces. In response to this, MTM and the University of Salford team of researchers developed the associated evaluative research questions:

1. How and if social media models enable social interpretation and encourage audience/s to engage with the IWM in different ways.

2. What are the challenges and risks of the use of social interpretation and the representation of public discussions in physical and digital cultural spaces.
3. Whether the use of social media models facilitates a re-balancing of the audience/authority relationship.

In this final section, we draw out some of our key findings from our work, in terms of the research reported here, and its transferability to other contexts within the creative industries, and beyond.

## 6.1 Engagement

This SI project appears to have engaged only a minority of visitors (approximately 2 per cent commented on the kiosks and far fewer used the QR codes), but there is some evidence that it has had a positive effect (on balance) on those who did become involved in either reading other visitors' comments or interacting with the technology (55 per cent in IWM London used the kiosks, and 34 per cent in IWM North). Kiosk users were more satisfied with their visit, and most respondents felt that the technology was an appropriate development – demonstrating that the museum was moving with the times, and staying relevant to young people. Family groups in IWM London showed an increase in SI satisfaction since the previous year, which has primarily been driven by changes in the temporary exhibitions but the presence of the technology in the Family in Wartime may have played a part, because it engaged both children and their guardians.

These positive effects were mostly generated by the kiosks; the app, QR codes and mobile website page elements of the SI technology generated little visitor usage, and little evidence of increased engagement. For the small number of mobile page views, analytics data shows that users were mainly just viewing one page and that many were 'bouncing' straight away, which indicates that the mobile web proposition was not successfully captivating users.

Analysis of the type of comments left on kiosks indicated that the technology was encouraging users to feel more connected with the museum (although often that was in the sense of providing an 'electronic visitor book', which was an unintended role some visitors ascribed to the kiosks) connected with the exhibited objects (where comments were directly relevant to the object in question, especially the very thoughtful examples), and connected with other visitors (in that the 'on topic' comments were motivated by a desire to share one's personal experiences or knowledge with other visitors, although not so much in the sense of direct dialogue between one visitor and another). Social interpretation certainly formed a significant proportion of the comments (43 per cent), and seemed (from qualitative research) to complement rather than replace the other types of social interaction taking place around the exhibits, such as verbal discussion with companions and the expectation of informing interested friends or family by phone or email after the visit.

There was also a high level of spamming and trolling, and unhelpful commentary. Whilst a certain level of meaningless interaction would always have been expected, the actual volume was perhaps higher than expected by IWM. This was almost certainly caused primarily by the number of children who interacted with the kiosks. Consideration could be given in future projects to introducing a moderation system that would help to filter out more of that type of comment, or offer a range of screens positioned at different heights so that some are accessible by adults only. Certainly, the volume of inane and banal comments was one of the more negative features of the SI technology in both IWM sites, causing many visitors (judging from the qualitative research elements) to avoid reading further comments or to leave their own.

The SI kiosks therefore do appear to have facilitated sharing and interpretation, and augmented museum experiences, for many of those who used them. Visitors have not especially been encouraged to 'collect' museum objects, however, but perhaps future iterations of the online and mobile aspects of SI technology could develop this personal curation feature.

We should not forget that whilst digital mediators did not replace other forms of engagement with the museum, or indeed necessarily surpass the potential level of SI possible, they did act as a further channel to transform the reach of interpretation throughout the museum space and beyond. Increased reach of social interpretation within the context of the museum visit was achieved by the comment kiosks, by the proportion of comments which had a SI flavour to them (49 per cent for IWM North, 39 per cent for IWM London), for the proportion of visitors who read comments (26 per cent for IWM North, 38 per cent for IWM London).<sup>35</sup> 'Beyond the museum walls' proved to be a more difficult challenge (Kidd 2011a): there was little evidence of increased reach, because there was so little uptake of the app (and, by extension, its sharing and commenting features). In future projects, a simpler mechanism for commenting on the museum website or on social networking sites would increase the likelihood of such social interaction reaching non-visitors to the museum sites, above and beyond the level of non-visitor communication that is already generated verbally and by email from museum visitors. The original SI proposals by IWM might have offered that simpler mechanism, in that the comment kiosks were originally intended to offer the potential to share comments online, rather than only 'in museum' as in the actual implementation of the technology.

There were differences between IWM North and IWM London in terms of the level of SI evident in comments left on kiosks. It is likely that subtle changes to the design of user interfaces can influence the type of comments left. IWM North's simpler design (one screen, one question) may have contributed to the greater proportion of SI among the comments left. Conversely more kiosk users in IWM London claimed to have learned something extra, had fun using the technology, and other benefits – presumably due to the additional museum text provided and the movement between screens – so there were different positive effects generated by the earlier kiosk design.

This research has suggested that a greater level of usage and volume of comments could be generated, in future, with changes to the positioning and signposting of the comment kiosks and the QR codes. IWM London kiosks enjoyed a higher level of usage than IWM North and it seems as though the placement of a series of screens within a single exhibition is beneficial. Visitors who participated in the walking interviews and the focus groups recommended making both the kiosks and the QR codes more noticeable, via bolder signs (such as a 'call to action' placed on the wall above, e.g. 'have your say' or 'what do you think?') and, for the QR codes, making the usage instructions much more comprehensive.

The choice of objects is also influential in determining the level of SI engagement that will take place. The objects that attracted the highest proportion of SI among their kiosk comments were the largest and, gauging by qualitative interviews and observation, they were also the most physically impressive and often the most controversial (i.e. all four of the IWM North objects and the Squander bug and the Gas Mask in IWM London). These qualities are likely to have encouraged visitors to leave a comment, and this ability for certain objects to generate 'social currency' should be capitalised on for future projects. We would suggest that this is in part due to the ability of such objects to engender an emotional impact or response (Bagnall and Rowland, 2010). In a climate where the experiential is valued and prioritised in museums, the fact that this way of enabling social interpretation does allow visitors to respond to, and engage with the IWM on an emotional level, is clearly of significance to the IWM, but also more broadly across the museums sector.

At IWM North there was also some evidence of visitors responding to, and being inspired to comment by, the aesthetic presentation of the object. These findings lend some support to those who argue for the continuing impact and significance of the 'object', and the need to place it at the centre of the visitor experience (Fleming, 2005). It will be important to bear this in mind in any future development of the SI project, but this also has relevance more widely across the museum sector. Digital modes of interpretation and interactivity can enhance engagement but in the museum context the materiality of the 'object' is still at the heart of the visitor experience.

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<sup>35</sup> Base: IWM London Family in Wartime visitors =101; IWM North visitors = 81

## 6.2 Risks and Challenges

Risk, as associated with Web 2.0 and social media, is often conceptualised with respect to notions of privacy. However, in the case of IWM and their SI project, a key consideration from the outset was the potential for organisational harm as a result of their engagement with participatory ideals related to user-generated object curation and community comment moderation. Returning to Alua (2010), the generation of unverified information related to organisations can clash with the information that those in the organisation would like to see created. For IWM then, given the risky nature of the objects they display as an organisation, the problem could be conceptualised as one of balancing engaged comment with intended and unintended reputational damage. Thankfully, from one perspective, IWM's fears did not become a reality. Despite some comments being moderated because they could have been interpreted as deeply offensive and inflammatory, no major complaints were raised and there has been no negatively oriented media coverage for them to deal with.

However, another key risk has emerged and has had an impact upon the project. The banality of the comments, and the extent of trolling, has caused some visitors to the physical museums and the IWM website to express dismay at other visitors and the IWM. In no way do we believe this has had a particularly major impact upon the organisation, and it has to be remembered this was a pilot project. Yet, such an outcome does suggest the need to reflect upon the benefits of conceptualising risk in a much broader fashion.

In terms of challenges, an underlying thread of this project has been the roles of the non-human mediators in SI. Here we wish to point the reader to just a few of these and explain just how they can transform sociality and socialisation in arts and culture projects, such as the one we report on here. Rhetoric is an early actor in the SI project – Web 2.0 and social media rhetoric is arguably infused with the technological determinism of the dot.com boom era of the late 1990s, early 2000s. This rhetoric engages people to enroll such media into the daily life of arts and cultural organisations. Such rhetoric engages us conceive that Web 2.0 is the right thing to do, it is unquestionably beneficial. Then, if we fast forward, once up and running, platforms such as iOS and Android become important actors, as do (indirectly) the organisations associated with them. Such actors have become, in actor-network theory terms, obligatory passage points: due to their popularity you are obliged to engage them, if you want to play in the Web 2.0/social media network.

Moving forward to the operation of the project, the museum buildings and the organisation of space within them were key mediators. As we talked with visitors and analysed our experiences, we experienced and observed much impact here. For example, Wifi and 3G signals could not act to deliver access to the QR code experience in certain areas because the building mediated, in the fashion of producing dead spots. Conversely, building structures and layouts also facilitated the process. For example, it is no surprise that these worked well for the large Crusader exhibit at IWM North which is located at the well-lit entrance of the main gallery space. This exhibit generated the most-accessed object data. Other codes in the deeper, darker areas of buildings near network deadspots did not fare so well. The lighting in particular was also mentioned as it affected the abilities of smartphone cameras to scan the QR codes. Moreover, at one point, the kiosks disrupted proceedings too. A fault made the touchscreen temperature increase, making comment entry a tricky endeavour for a short time at IWM London. Whilst clearly, users are important in such projects, one should not forget the other actors waiting in the wings.

## 6.3 Audience/Authority Relationship

It is evident from the research that, despite its aspirations, the SI project has only made a limited contribution to amplifying the voice of the visitor at the IWM. Whilst there are examples of participation and content creation, the character of the vast majority of the social interpretation is somewhat lacking in insight, and it is difficult to see how engagement in this form could contribute to the democratisation of knowledge, or a pose a challenge to the authoritative voice of the museum. The majority of visitors

felt that most of the existing comments on the screens were banal and inane, and that this provided little incentive to read them, or formulate one's own comment.

Yet in one way, by providing visitors with an interactive digital means to comment, and employing minimal moderation, the IWM has allowed visitors to 'speak' freely and enabled these comments to be read. It could be argued that, by leaving numerous 'cool', 'awesome' and 'LOL' comments visible, the IWM has to a degree allowed their visitor's voices to be heard (Hindman, 2008), even if enabling this type of social interpretation was not the original intention of the IWM.

Importantly there were examples of social interpretation, from the comment kiosks and the website, where it was evident that consideration, emotion and thought had gone into the comments. The value of these in providing another point of view was recognised by our research respondents. There was also evidence of questions being posed to the museum, and the museum text (on the comment kiosks/and website) being questioned. It is here where we can begin to see the potential for SI to provide a digital means through which the voice of the museum could be challenged.

There is clearly an appetite from parts of the IWM audience to have a dialogue with, and a more meaningful connection to, the museum. However, it was also evident that in the main this desire for dialogue was not fulfilled, as we found limited evidence of the museum responding to the questions or queries posed. If the IWM is serious in its intention to engage in cultural exchange with its audience, then it will need to face up to the challenge that 'being social' entails (Kidd, 2011a). It needs to find a means to enable this audience engagement to be a dialogue rather than a one-way communication. This may well be a resource issue, as the number of questions and queries requiring a response are, and no doubt will be, significant. However, having raised expectations, a lack of responsiveness from the museum will do little to encourage further participation from its audience.

There are important lessons here for the wider arts and cultural sector, as there is a need to recognise the degree of resource required to meet the needs and expectations of a more participatory and engaged audience.

## 7 Research Outputs from the Project

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## 9 Appendices

### 9.1 List of objects with associated comment kiosks

#### 9.1.1 IWM London

- **Evacuee's Label** made out to Doreen Bowring, EPH 3764
- **The Queue at the Fish-Shop**, 1944 Evelyn Dunbar oil on canvas IWM ART LD 3987 [painting]
- **Replica Gravy Browning and Make-up Pencil**
- **Infant's Anti-Gas Helmet**, EQU 3716
- **Squander Bug Air Rifle Target**, EPH 4611
- **A group of soldiers and women dancing in a street near Berkeley Square**, London, on VE Day, 8<sup>th</sup> May 1945, IWM EA 65885 [photograph]

#### 9.1.2 IWM North

- **Royal Horse Artillery E Battery 13 Pounder Field Gun**, ORD 101
- **Baghdad Car**, 4907.20.1
- **Dennis Fire-fighting Trailer Pump**, 4109.33.1
- **T34 Tank**, Loan 4800.60.3

### 9.2 Questions inserted into IWM visitor survey

#### Question 1 – Awareness and use of comment screens

In IWM London, ask all respondents who said they had visited the Family in Wartime exhibition

In IWM North, ask all respondents

***Did you notice the interactive comment screens during your visit, and if so how many of them did you use?***

IF POSSIBLE, SHOW IMAGE OF COMMENT SCREEN TO PROMPT SINGLE CODE. DO NOT ROTATE ORDER.

No, did not notice them

Yes, noticed but did not use them

Yes, used one

Yes, used 2-3

Yes, used 4 or more

Don't know

IF CODE 1 OR 6, THANK & CLOSE / SKIP TO REMAINDER OF SURVEY

IF CODE 2, PROCEED TO QUESTION 6

IF CODE 3-5, PROCEED TO QUESTION 3

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**Question 2 – Interaction with comment screens**

Ask respondents who coded 3-5 on Question 1

***Which of the following did you do on the comment screen(s)?***

SHOW THE LIST TO RESPONDENT

MULTICODE RESPONSE. ROTATE ORDER

Made a comment

Read other peoples' comments

Read the text information provided by the museum

Thought about the question asked by the museum

'Liked' or 'disliked' someone else's comment

Replied to someone else's comment

Reported a comment to the museum

Other (please specify)

Don't know

Did not use them after all

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**Question 3 – Benefits of comment screens**

Ask respondents who coded 3-5 on Question 1

***What did you like about the comment screen(s)?***

SHOW THE LIST

MULTI CODE. ROTATE ORDER

I learnt more about the exhibit

I enjoyed hearing other people's perspective on the exhibit

I felt like I had made a contribution

I enjoyed being able to communicate with the museum

I enjoyed being able to communicate with other visitors

It made me think more deeply about the exhibit

It was fun using the technology

It was something different to do

Other – please specify

Don't know

Nothing

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**Question 4 – Improvements to comment screens**

Ask respondents who coded 3-5 on Question 1

***What improvements do you think could be made to the interactive comment screens?***

OPEN RESPONSE. Please write the answer in full in the space below

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**Question 5 – Reasons for non-use**

Ask respondents who coded 2 to question 1

### ***Why did you choose not to use the comment screens?***

MULTI CODE. ROTATE ORDER.

I didn't think it would be interesting

I didn't have time

I thought it would be too complicated

I didn't understand what they were for

I don't like using technology in museums

Screen(s) was being used by other visitors – didn't want to wait around

Other – please specify

Don't know

### **9.3 Recruitment criteria for focus groups**

A number of recruitment criteria were specified to ensure that participants in the focus groups were broadly representative of the museum audience, and would be well-placed to make contributions to the discussion of the SI technology. Specifically, respondents were screened to ensure that:

- they were 25-64 years old
- they had visited IWM within the last 2 months (in many cases, respondents had actually visited in the last few weeks)
- they lived relatively near to IWM (to ensure easy access to the groups)
- they covered a range of motivations for visiting IWM
- they were distributed across the BC1C2 socio-economic grades
- at least half had smartphones, and at least half used Facebook
- did not work in advertising/marketing/market research/journalism/museums and galleries (because such respondents would have been biased and too well-informed to represent the views of typical visitors)

### **9.4 Discussion guide for staff interviews**

- What have you observed about the extent to which visitors notice and/or engage with the technology in the galleries (the kiosks and QR codes)?
- What have you observed about the way that visitors interact with the technology (e.g. alone or in groups, quietly or talkatively etc.)?
- Have any visitors spoken to you directly about the technology (e.g. to ask questions, make a complaint etc.)?
- In your view, what does the technology add to the experience of visiting the gallery? Are there any ways in which it could be improved?

### **9.5 Recruitment criteria for walking interviews**

A number of recruitment criteria were specified to ensure that participants in the walking interviews were broadly representative of the museum audience, and would be well-placed to make contributions to the discussion of the SI technology. At each of the pre and post stages, we screened respondents with the aim of recruiting 10 interviews per site that were as close a match as possible to the criteria. In IWM London, the target profile was as follows (and IWM North used an adapted version):

- 6-7 males
- a range of ages, with at least 3 aged 25-40, and at least 3 aged 55+
- a range of group composition, including at least 1 individual, 1 couple, 1 family group with children aged 8-11, and one other adult group
- a mix of Londoners, non-Londoners and tourists, with no more than 4 from each group
- a range of motivations for visiting IWM
- a mix of socio-economic grades, with 5-7 ABC1 and 3-5 C2DE
- a mix of ethnicity, with 1-2 from an ethnic minority group.

## 9.6 Profile of respondents recruited for qualitative walking interviews

SI Stage 1 – Walking interviews at IWM London – Breakdown of interviewees

Interview no.	Interviewer	Group type	Group members	Gender	Age	Social grade	Ethnicity	Residence	Reason for visiting
1	CR	Individual	Woman	F	50-55	C1	Black	Non-Londoner	Self-developer
2	TP	Individual	Man	M	50-55	B	White	Tourist	Specialist interest / self-developer
3	CR	Family	Mother	F	45-49	C1	White	Tourist	Facilitator / education
			Son	M	16-19	C1	White	Tourist	Education
4	TP	Friends	Woman	F	20-24	C1	White	Non-Londoner	Special interest / experience
			Man	M	20-24	C1	White	Londoner	Experience
5	CR	Individual	Man	M	50-55	C1	White	Tourist	Specialist interest / self-developer
6	TP	Friends	Man	M	20-24	C1	White	Tourist	Specialist interest / experience
			Man	M	20-24	C1	White	Tourist	Specialist interest / experience
7	CR	Friends	Man	M	25-29	C1	White	Non-Londoner	Experience
			Man	M	25-29	C1	White	Tourist	Experience
8	TP	Family	Father	M	50-55	A	White	Tourist	Specialist interest / facilitator
			Son	M	11-15	A	White	Tourist	Specialist interest / education
9	TP	Couple	Man	M	30-34	B	White	Non-Londoner	Experience / self-developer
			Woman	F	45-49	C1	White	Non-Londoner	Experience / self-developer
10	TP	Family	Grandmother	F	45-49	B	White	Non-Londoner	Facilitator / education
			Mother	F	25-29	D	White	Non-Londoner	Facilitator / education
			Son	M	8-11	D	White	Non-Londoner	Educational / experience
			Son	M	0-7	D	White	Non-Londoner	Educational / experience

SI Stage 2 – Walking interviews at IWM London – Breakdown of interviewees

Interview no.	Interviewer	Group type	Group members	Gender	Age	Social grade	Ethnicity	Residence	Reason for visiting
1	TP	Individual	Man	M	65+	B	White	Londoner	Specialist interest / self-developer
2	CR	Friends	Woman	F	20-24	C1	White	Londoner	Explorer / Specific exhibition
			Woman	F	20-24	C1	White	Londoner	Explorer / Educational
3	TP	Couple	Man	M	35-44	B	White	Tourist	Self-developer / Experience
			Woman	F	16-19	B	White	Tourist	Self-developer / Experience
4	CR	Couple	Man	M	55+	C1	White	Tourist	Experience
	CR	Couple	Woman	F	55+	C1	White	Tourist	Experience
5	TP	Couple	Man	M	20-24	C1	White	Non-Londoner	Self-developer / Experience
			Woman	F	25-34	C1	White	Non-Londoner	Self-developer / Experience
6	CR	Individual	Man	M	45-54	C1	White	Tourist	Pro hobbyist / Historical interest
7	TP	Family	Father	M	35-44	C2	White	Non-Londoner	Facilitator / specialist interest
			Mother	F	35-44	C2	White	Non-Londoner	Facilitator
			Son	M	8-11	C2	White	Non-Londoner	Educational
			Son	M	0-7	C2	White	Non-Londoner	Educational
8	CR	Friends	Man	M	20-24	E	White	Londoner	Pro hobbyist / Historical interest
			Woman	F	20-24	D	White	Londoner	Facilitator / Self-developer
9	TP	Couple	Man	M	55-64	B	White	Tourist	Self-developer / Experience
			Woman	F	55-64	B	White	Tourist	Self-developer / Experience
10	TP	Family	Father	M	45-54	C1	White	Tourist	Facilitator / specialist interest
			Son	M	12-16	C1	White	Tourist	Educational
			Son	M	8-11	C1	White	Tourist	Educational



SI Stage 1 – Walking interviews at IWM North – Breakdown of interviewees

Interview no.	Interviewer	Group type	Group members	Gender	Age	Social grade	Ethnicity	Residence	Reason for visiting
1	GB	Individual	Woman	F	25-34	A	Other	Tourist	Experience / specialist interest
2	GB	Individual	Man	M	35-44	B	White	Non-Greater Manchester	Self-developer/ Explorer
3	GB	Family	Mother	F	45-54	C1	White	Non-Greater Manchester	Facilitator / educational
			Father	M	45-54	B	White	Non-Greater Manchester	Education/specialist interest
			Daughter	F	11-15	B	White	Non-Greater Manchester	Educational
			Son	M	11-15	B	White	Non-Greater Manchester	Educational
4	GB	Friends	Woman	F	65+	E	White	Greater-Manchester	Experience
			Woman	F	65+	E	White	Greater Manchester	Experience
5	GB	Individual	Man	M	65+	D	White	North West	Specialist interest / Explorer
6	BL	Couple	Man	M	35-44	C1	White	Non-Greater Manchester	Explorer / experience
			Woman	F	35-44	C1	White	Non-Greater Manchester	Explorer / experience
7	BL	Couple	Woman	F	25-34	B	White	Greater Manchester	Experience
			Woman	F	25-34	B	White	Greater Manchester	Experience
8	BL	Family	Father	M	50-59	N/k	White	Greater Manchester	Facilitator/Pro-hobbyist
			Son	M	11-15	N/k	White	Greater Manchester	Educational/Special interest
9	BL	Family	Man	M	45-54	A	White	Greater Manchester	Educational/Explorer
			Daughter	F	11-15	B	White	Greater Manchester	Educational/Explorer
			Daughter	F	11-15	B	White	Greater Manchester	Educational/Explorer
10	GB	Family	Grandmother	F	65+	E	White	Tourist	Facilitator / experience
			Grandfather	M	65+	B	White	Tourist	Experience / Specialist interest
			Son-in-law	M	45-54	B	White	Tourist	Experience / Specialist interest
			Daughter	F	45-54	C1	White	Tourist	Experience / self-developer

SI Stage 2 – Walking interviews at IWM North – Breakdown of interviewees

Interview no.	Interviewer	Group type	Group members	Gender	Age	Social grade	Ethnicity	Residence	Reason for visiting
1	BL	Individual	Man	M	34-44	C1	White	Greater Manchester	Facilitator / self-developer
2	BL	Family	Woman	F	35-44	B	White	Greater Manchester	Educational/Facilitator
			Son	M	0-5	B	White	Greater Manchester	Educational
3	BL	Friends	Man	F	25-34	N/k	White	Tourist	Explorer/special interest
			Woman	F	25-34	N/k	White	Tourist	Explorer/ special interest
4	BL	Individual	Man	M	25-34	B	White	Greater Manchester	Experience
5	BL	Family	Woman	F	35-44	C1	White	Greater Manchester	Educational/ Explorer
			Daughter	F	16-24	C1	White	Greater Manchester	Educational/ Explorer
6	BL	Individual	Man	M	35-44	C1	White	Tourist	Experience/ explorer
7	GB	Family	Father	M	35-44	C2	White	Non-Greater Manchester	Explorer/ Educational
			Mother	F	35-44	C2	White	Non-Greater Manchester	Facilitator /Educational
			Daughter	F	11-15	C2	White	Non-Greater Manchester	Educational
			Daughter	F	8-11	C2	White	Non-Greater Manchester	Educational
8	GB	Friends	Woman	F	65+	D	White	Greater Manchester	Experience
			Woman	F	65+	D	White	Greater Manchester	Experience
9	GB	Couple	Man	M	16-24	E	White	Tourist	Subject interest / Experience
			Woman	F	25-34	C2	White	Tourist	Self-developer / Experience
10	GB	Family	Father	M	35-44	B	White	Greater Manchester	Facilitator / Educational
			Son	M	8-11	B	White	Greater Manchester	Educational

## 10 Acknowledgements

This study was conducted by a four person team at the University of Salford and a two person team at MTM London, with funding from the Digital R&D Fund operated by Nesta, Arts Council England, and AHRC. Our sincere thanks go to all the members of the IWM SI project team, and their technical partners who cooperated so willingly with our research and contributed to this report: at IWM, Carolyn Royston, Jane Audas, Jeremy Ottevanger, James McSharry, Christian Statham, Jesse Alter Janice Phillips, Sarah Gilbert, Alex Willet. With additional thanks to: Wendy Orr, Toby Bettridge, Ben Tandy, Tom Grinsted, and the SI Advisory Panel; at the UCL Centre for Digital Humanities Claire Ross, Dr Melissa Terras, and Professor Claire Warwick; at Knowledge Integration, Rob Tice, and at Gooii, Taras Johnson and Benji Soar. We would also like to thank the visitors to IWM London and IWM North who participated in the research.

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