Culture24

Report from the second Culture24 Action Research Project





'A journey towards understanding and measuring digital engagement' by: Sejul Malde, Jane Finnis, Anra Kennedy, Mia Ridge, Elena Villaespesa and Seb Chan

A personal foreword from Jane Finnis

The times they are a-changin'. Digital tools have worked their way into every aspect of our lives. Even those people with high levels of digital fluency take for granted the increased levels of speed, access and mobility that as little as three years ago were hard to imagine. For many, the possibilities still feel a little bit sci-fi-esque, but as William Gibson observed so insightfully in 2003, "the future is already here – it's just not evenly distributed". This is as true for the cultural sector as anyone, with many organisations struggling to embrace the new reality of audience behaviour, let alone go boldly into a future of big data, the semantic web and seamless participation.

But this challenge is absolutely not about technology, which we are often guilty of fetishising as a solution to problems. It is first and foremost about audience and the ways in which digital technologies are changing their behaviours: at work, at home, on the move, learning, playing, questioning, socialising, sharing, communicating. Forever.

This report grapples with this shift in behaviours and tries to make sense of it on behalf of arts and heritage organisations. It tells the story of a shared journey towards understanding and measuring digital engagement; a story that emerges from taking the time to think, to question, to measure and to analyse. In 2011, with the publication of the first Let's Get Real report, we highlighted the lack of online attention share for cultural websites. We brought into the spotlight the widespread lack of focus online and highlighted the need for our sector to get much better at digital publishing.

We wanted to kick-start a dramatic shift in the way we plan, invest and collaborate on the next generation of our digital cultural services. Have we succeeded? Not yet, but this report has taken the journey to its next stage.

The project was a continuous challenge and this report is its reward. I invite the arts and heritage sectors to read and absorb it. I challenge them to take its recommendations to heart and believe that in doing so, we will collaboratively have more impact on our audiences.

So, breathe it in, soak it up and crucially, take time out to really integrate digital tactics into your own organisation's mission in your own way. Get real with us: there is so much more to learn.

Jane Finnis Action Research Project Lead Chief Executive, Culture24

This report tells the story of a shared journey towards understanding and measuring digital engagement; a story that emerges from taking the time to think, to question, to measure and to analyse.





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3 Introduction

In 2010 when Culture24 was setting up its first collaborative action research project one of the key questions we tackled was how to meaningfully integrate digital tactics into a cultural organisation's overall strategic mission. This sounds obvious but it is not as simple as it may first appear.

For many cultural organisations the online world and digital tools are still unfamiliar and unknown. They are aware of the knowledge gap between them and those (often younger) individuals who feel fluent in this new language. This tension is made worse by the fact that although digital technologies are understood as tools that need to be used and shaped to a purpose, they also change the very nature of their users' behaviour - allowing access to information on the move, facilitating connections between sets of previously separate data and offering a multitude of opportunities for sharing and participation.

As such, the shift needed for an organisation to feel confident in understanding these changes in user behaviour and then to integrate the use of digital tactics into their overall strategic mission in useful ways requires a significant shift in internal thinking at all levels. The time, space and commitment needed to do this well cannot be under-estimated.

Many cultural organisations also face a raft of internal pressures sparked by expectations such as:

- Online developments will significantly improve audience reach
- Online developments will provide access to new audiences (especially younger ones)
- We need to be seen to be using digital tools and not getting left behind
- Senior management (directors/trustees) want us to build a big, *shiny* new showcase digital 'thing' that will show everyone we are cool (app, kiosk, game, etc.)

- Digital will help us earn more money
- Digital will increase participation

These expectations are often unrealistic and are strategically the wrong starting place for thinking about any new business development of any kind, but especially any using digital technologies. The starting point should, instead, be the mission of the organisation and the needs of the target audience. You need to know what you want to achieve and who it is for. A useful entry point for each cultural organisation to explore how their organisational missions can connect with the needs of their target audiences online is to examine the question 'what is digital engagement?' Once an organisation begins to understand this question, the key internal challenge then becomes one of digital literacy and technical capability amongst the staff team as they try to choose the right platform, channel or approach to do what they want to do. The journey becomes essentially one of internal change that is geared to nurturing digitally fluent staff and, crucially, digitally fluent decision-makers.

This action research project, led by Culture24 and involving 22 participating cultural organisations collaborating over an 11 month period, explored what digital engagement could mean for them. Each organisation in the project was supported through the process of considering this question in more detail in order to try and focus them to segment their audience and set more specific objectives. The project provided a welcome opportunity to step back from the day to day issues of delivering digital services and to instead reflect upon the wider issues, whilst learning and sharing with colleagues and experts.

This report tells the story of this journey for the 22 project partners, facilitated by the Culture24 project team. Its recommendations and learning provide invaluable insights and are a snapshot of the wider struggle the cultural sector faces to significantly improve its digital services.



4. Key insights and recommendations

4.1 Key insights

Measure what you value, don't value what you measure

Evidencing, measuring and analysing the ways in which an organisation's activities deliver their mission should be an integral part of everyday working life. Understanding what success or failure looks like is the key to knowing if you have achieved either. You could even go as far as to say that failure is only failure if it goes undetected, because any failure detected can be acted on and improved.

For cultural activities, where success criteria (or performance indicators) are often *not* financial, this becomes a search to measure *value*. Within this search for value we can usefully use data analysis to drive better decision-making, internal change and ultimately to improve impact. Measuring value is subjective and must always be personal.

To better understand digital engagement, cultural organisations need to explore what and who they value, as well as understanding what their audiences value, before exploring how these can be enhanced through digital channels.

Project participant: "We can now be more focussed on those metrics that matter to us, and we are able to give reasoning as to why we are measuring what we measure."

Learn to love segments, analysis and reporting

Without mastering the art of knowing and then sharing with colleagues what works and what doesn't, how are you going to build real digital capacity and understanding across your organisation?

A well-conceived analytical report that tells the story of how your organisation is trying to deliver its mission via its digital activities helps senior management to make decisions based on real data. The ability to segment your audience using analytics tools allows you to look more deeply into existing behaviours and therefore understand which behaviours represent a positive outcome for your organisation.

Project participant: "The segmentation analysis work, and the knowledge sharing as a result of this, really forced me to dig deeper in Google Analytics than I had done before and gave me the knowledge and experience to look meaningfully at the data."

Demand not supply

Ensuring a focus on user behaviour and demand and a move away from the institutional supply- driven model is vital. It means a shift from 'we have these ceramics, how can we tell people about them and improve access to them?' to 'lots of people are interested in pottery, how can we start a conversation about our shared knowledge around our ceramics collection?'. This reframing is an issue that impacts all aspects of an organisation's work - offline and online

- and permeates programming, education, fundraising, events, curation, production, retail and research.

Project participant: "The project's enabled us to think more about types of audience on the website, but also being able to categorise our content to different audiences rather than thinking of content in a departmental structure."

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Understanding of motivating behaviours

One way to define engagement for an organisation is through understanding the changing behaviours of its audiences. Organisations need a way to interpret the metrics they are collecting. Examining them in the context of indicative audience web behaviours allows such interpretation to begin to happen.

Analytics data can tell you what your audience is doing and in some cases how they are doing it, but does not give you any clear insight into *why* they are doing it. Nor do analytics offer any certainty that your audience will continue to behave that way in the future. By understanding the motivations of your audiences, and exploring this alongside behaviours, a much more complete picture of audience engagement is drawn.

Project participant: "Understanding individual motivation, when linked with real behaviour, provides a far more rounded insight into our online audiences."

Time to think, time to change

For anyone attempting any of this, it is vital to be realistic and honest about the effort and time digital activities take. You will need to ensure you have time to think, space to try things out (and fail) plus the buy-in of your organisation.

Speed of change is daunting and difficult to keep up with, even for well-resourced organisations. The birth and death of many online brands and services over recent years is evidence that even those organisations born digital struggle to stay relevant to users. These changes also affect how you need to track your organisation's relevance and impact.

Good evaluation practice is never 'set and forget'. In particular you need to be responsive to:

- on-going changes to measurement tools
- importance of search and discovery and the benefits of a holistic approach to content
- the value of A/B and user testing to try stuff out
- evolution of new platforms and shifting audience loyalties, behaviours and desires.

Project participant: "Currently the way we report our metrics is fairly ad-hoc and doesn't feel like it has a huge impact on what we do. So it was useful to have an incentive to spend time using analytics to ask ourselves questions about what we do and what impact it has."



4.2 Key recommendations

4.2.1 Understanding web behaviours (See Chapter 7 for more information)

- Keep asking yourself what are the most important goals for my organisation that my website helps people accomplish?
- Don't just ask what your audience does on your website or how they do it, but also why
- Learn to love segments in analytic tools
- Prioritise your design and content decisions based on the patterns of audience behaviour you want to have on your website
- Keep reviewing your audiences' web behaviours to better understand and act on changes
- Make it a priority to be able to access analytics data from any third party ticketing websites or systems you may use

4.2.2 Understanding mobile behaviours (See Chapter 8 for more information)

- If 20% or more of your online audience is visiting your site via mobile devices and you don't have a mobile-friendly site, you need to address this as a priority
- Track visits from mobile devices, separating out mobile phones and tablets and keep a close on eye on differences, and how those differences are changing over time
- Consider the tools that you may need to better
 understand mobile and tablet users
- Focus on micro conversions as well as macro conversions when seeking to understand mobile behaviours

4.2.3 Understanding social media behaviours

(See Chapter 9 for more information)

- Use the Culture24 'Social Media Evaluation Framework' (see page 37) to help you meaningfully interrogate your audiences' existing social media behaviours against your organisational goals
- Consider if driving social media behaviours is the best way to achieve your organisational goals
- Remember social media is not free
- Use interaction and virality rates as a way of evaluating which social media posts users like to engage with
- Using imagery in your social media posts will drive audience comments and response
- Use qualitative analysis to interrogate more deeply the quality and sentiment of conversations taking place on your social media channels
- If your primary objective for using social media to engage audiences is to drive them to your website – think again!
- Remember that audience engagement with your organisation also occurs outside your own social media channels

4.2.4 Conducting digital engagement research experiments

(See Chapter 10 for more information)

- If you have a hunch, try and find away to test it out
- Incorporate mini online research experiments and testing into your ongoing digital activities
- Don't try and research everything in one go small findings can be hugely insightful
- Validate your results where possible against available benchmarks
- Don't worry if your experiment fails, this is still a positive outcome
- Make sure your existing technology supplier relationship is fit for purpose to support an experimental approach
- Realise that undertaking research experiments provides the additional benefit of 'learning to learn'

5. Project background and approach

5.1 Let's Get Real - Phase 1

The starting point for our second phase of action research work was the 2011'Let's Get Real' report and findings. This report was the outcome of Culture24's first collaborative action research project 'How to evaluate online success' ¹ which took place between June 2010 and Sept 2011 and involved 17 UK cultural venues.

The frankness of this report and its openness in speaking about the failure in the cultural sector to really capture the attention of online audiences was met with a very positive reaction. It has spiked the interest of the cultural sector in the UK and internationally with presentations about the findings at DISH 2012, Museums & Web 2012, Bits2Blogs 2012, British Council Sino-UK Creative Economy Forum and others. The report itself has also been quoted and shared widely with over eleven thousand downloads between October 2010 and June 2013.



The project was the catalyst for a series of intensive Google Analytics workshops called 'Make It Count'² in partnership with Google around the UK. These workshops were designed to offer both strategic and practical advice to cultural organisations and focussed on the use of Google Analytics and how best to relate its use to overall business development strategy.

5.2 Project approach to Phase 2

Phase 2 brought together 22 partner cultural organisations for four face-to-face workshops over a period of eleven months between July 2012 and May 2013.

With funding of cultural organisations becoming ever tighter it is more important than ever that investments are made wisely. People need to make sure they invest their time, energy and cash based on an honest evaluation of what works well and to commit fully to learning from mistakes. Meaningful insights into the value of online activities lie not in data collected, or the tools and platforms used for evaluation, but in the shift in thinking that needs to happen at a deep level within every cultural organisation. These lessons can only be found through careful analysis of the data against each organisation's primary objectives.

This project took a highly collaborative approach to these issues, which was mirrored by a collaborative funding model with each participant contributing £2,500.

The core project team consisted of:

- Jane Finnis, Chief Executive, Culture24
- Sejul Malde, Research Manager, Culture24
- Mia Ridge, Doctoral Researcher, freelance cultural heritage technologist
- Seb Chan, Director of Digital & Emerging Media, Smithsonian, Cooper-Hewitt
- Elena Villaespesa, PhD student, University of Leicester

Culture24's role was to lead and coordinate the project and bring in experts as necessary to support all stages of the project delivery.

Mia Ridge and Seb Chan both brought invaluable technical knowledge to the project. They both have significant experience of working with digital issues relating to the cultural sector, and were able to provide expert guidance to participating organisations throughout the project relating to the practical use of technologies to gather data and how to draw meaningful insights from this.

The 'Social Media Investigation' detailed in Appendix 1 (and summarised in Chapter 9), which fed into the overall research project, was carried out by Elena Villaespesa and forms part of her PhD work for the School of Museum Studies at the University of Leicester.

¹ http://weareculture24.org.uk/projects/action-research/

² http://weareculture24.org.uk/knowledge/conferences-and-events/make-it-count/

Together the core project team curated the project, carrying out the research, data collection and analysis which was then fed back and acted on by the participating organisations. This formed the basis of the three main areas of research (web, mobile, social) which are explained in detail in this report.

It should be noted that the project team understands that web, social and mobile are not areas distinct from each other in terms of user activity, content or technologies but instead are related terms describing our interconnected online experiences. Their division in this way simply reflects the methodology this project used to frame the research activities. Other experts were brought into the process at various points to advise on key research investigations, the analysis of data and the documentation of the process as detailed in this report:

- Rob Stein, Deputy Director, Dallas Museum of Art
- Matt Locke, Director, Storythings
- Anra Kennedy, Content & Partnership Director, Culture24

Project Partners



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6. What is digital engagement?

Chapter summary

This chapter details how the project embarked on its collaborative journey, seeking to understand digital engagement. The process began with a knowledgegathering exercise that would then inform the way we shaped our specific lines of enquiry. This exercise explored two perspectives:

1. Macro - examining how other sectors might think about digital engagement, with input from Matt Locke, Director of Storythings

2. Micro - drawing upon the research group's own knowledge, experiences, data and views of the issues.

We then reflected upon the insights drawn from those two perspectives. This process and the knowledge gained informed the approach we took to interrogating digital engagement more deeply. We decided to take a practical look at the existing behaviours of audiences via three digital channels: web (chapter 7), mobile (chapter 8) and social media (chapter 9).

6.1 Background

We knew at the outset of this action research project that seeking to explore a question such as 'what is digital engagement?' for cultural organisations was setting ourselves up for failure. 'Engagement' is one of the most slippery of concepts, meaning many things to many people.

To better understand digital engagement, cultural organisations need to understand what and who they value, along with what their audiences value, before exploring how this ambition might be enhanced through digital channels.

As a group we were interested in undertaking a collaborative journey to shed light onto these questions. Our aim was not to arrive at a set of unified answers, but instead, to derive a way of thinking about the questions in a joined-up and informed manner.

To start this journey we needed to decide as a group which specific lines of enquiry would be useful. We needed to become better informed about existing knowledge about digital engagement from both a macro and micro perspective. For the macro viewpoint, we were keen to find out how other sectors might be approaching the issue. From a micro perspective, we wanted to draw upon the group's existing knowledge, experiences, data and views on digital engagement.

To better understand digital engagement, cultural organisations need to understand what and who they value, along with what their audiences value, before exploring how this ambition might be enhanced through digital channels.

6.2 What we heard from the experts

Exploring the macro perspective

Matt Locke, Director of Storythings and former Head of Multiplatform Commissioning at Channel 4, attended the first project group workshop. He spoke about the evolving nature of digital engagement and how commercial organisations such as Channel 4 have transformed their output in order to connect with audiences more meaningfully. Matt reflected on how, in the digital age, organisations have to adapt to the changing attention patterns and behaviours of audiences in order to connect with them more meaningfully.

He presented a potted 'History of the Internet in 41 behaviours'³, to demonstrate how digital engagement has rapidly changed and expanded audience behaviours. He described how organisations should no longer seek to understand their audiences as rigid personas who behave in a unified way based on static demographics, but rather as responsive individuals continually adapting their behaviours according to new forms and channels of digital participation.

Matt proposed that one way to define engagement for an organisation is through understanding the changing behaviours of its audiences. He went on to explain how organisations that are better at driving engagement look to align their organisational audience goals with key target audience behaviours. This involves examining which behaviours are needed from audiences in order to achieve these goals, before examining what data organisations have about their ability to perform these behaviours.

Exploring the micro perspective

Following Matt's presentation, the group discussed what engagement meant for each of them by examining and articulating their organisational missions, potential target behaviours and their digital engagement goals for specific audiences Shared issues drawn from these discussions included:

- Difficulty in linking the broader organisational mission with specific digital approaches and objectives
- Lack of understanding of how to interrogate analytic metrics meaningfully in order to examine digital engagement
- Difficulty in defining specific audience engagement goals in measurable terms
- Desire to understand more about their audiences' existing behaviours on digital platforms (before any reflection on target behaviours could be carried out)
- Desire to understand the impact of mobile devices on audience behaviours.

One way to define engagement for an organisation is through understanding the changing behaviours of its audiences

6.3 What we understood to be important

From the discussion the following points were agreed to be important:

- Digital engagement is not separate from other forms of audience engagement
- The key digital engagement goals for an organisation must be connected to the broader audience engagement mission of the organisation
- Digital engagement goals can be interpreted as those that meet the key target behaviours of audiences, which can take place via digital platforms
- In order to understand how to meet target behaviours via digital platforms, an organisation must have an understanding of its existing audience behaviours taking place on these platforms

- To track the progress of digital engagement goals, they should be measurable in some way and there is a whole host of tools and metrics available that can do this. The usefulness of these needs to be interrogated for each organisation based on their broader audience engagement mission, making it vital to measure what you value as an organisation and not simply value what you measure
- The increasing use of mobile technologies and smartphones continues to dramatically change audience behaviour, but the pace of change within cultural organisations is not keeping up with this.

6.4 Our next steps

Taking these points together, it was agreed to interrogate engagement further by taking a practical look at the existing behaviours of audiences via three digital channels: web (detailed in chapter 7), mobile (detailed in chapter 8) and social media (detailed in chapter 9).

This would allow the group to interrogate the usefulness of a variety of metrics for engagement as well as to examine how those metrics could be linked to broader organisational mission.

(Google Analytics was used as the primary analytical tool that explored these behaviours in connection to websites. Therefore as a preliminary exercise, and similar to the approach taken in Let's Get Real Phase 1, a Google Analytics 'health check' was conducted on the Google Analytics accounts relating to all project participant websites, to determine the correct set up and site structure for optimum tracking and analysis⁴).



4 To refer to the Google Analytics health checklist please see http://weareculture24.org.uk/projects/action-research/



7. Understanding web behaviours

Chapter summary

The challenge of understanding and interpreting web analytic metrics more meaningfully in terms of indicative audience behaviours was explored.

Rob Stein, Deputy Director of Dallas Museum of Art, explained the value of combining qualitative audience motivation data with quantitative web metric data in order to obtain a more complete picture of audience behaviour, value he's been exploring in his own research. Rob's methodology was then adopted by the project with partner organisations uploading a single question audience survey to their websites in order to track their audiences' motivations for visiting their websites. These motivations were then tracked against web analytical data captured via Google Analytics, to obtain meaningful insights into web behaviours.

These insights were drawn from comparisons made across all partner organisations, as well as more deeply for each organisation individually.

7.1 Background

Web analytic tools such as Google Analytics provide the opportunity to interrogate numerous site metrics. As cultural organisations access these tools the abundance of metrics and the numerous ways to report on them often overwhelm the usefulness of the tools themselves. An abundance of data does not make the task of drawing meaningful insight from the web any easier. Organisations need ways to interpret metrics, examining them in the context of indicative audience web behaviours. For example:

Type of metric	E.g.	Potential indicative behaviour
Audience -related metrics	Visits	How many times were audience members interested in viewing your website?
	Visitors	How many individual audience members were interested in viewing your website?
	Pages per visit	How deep was your average audience visit?
	Visit duration*	How long was your average audience visit?
	Time on page*	How interested was your audience in each page of your website?
	Bounce rate	How disinterested was your audience in continuing their exploration of your website?
	% Repeat visits	How loyal is your audience?
Visitor flow-related metrics	Landing pages, Exits, Drops offs, Map journey through	What was your audience's journey through your website?
Content-related metrics	Above metrics but per specific web pages	What information and material on your website was your audience interested at looking at?
Search-related metrics	Site search and/or external search traffic	What information on your website was your audience 'interested' in looking for?
Traffic source-related metrics	Referrals	How did your audience arrive on your website? What website were they on before?



Organisations need a way to interpret these metrics. Examining them in the context of indicative audience web behaviours allows such interpretation to begin to happen.

* Note on visit duration: understanding time-based metrics such as visit duration (or time on site) and time on page is problematic. This is because in their default configuration most popular analytic tools are unable to calculate how long a visitor spent on the last webpage of their visit. Tools measure entrances to a page and thus a single page visit (a bounce) is recorded as zero time spent even if the user spent a long time on it. Similarly, a three page visit with a visitor spending 30 seconds, 30 seconds, and 2 minutes respectively on each page before leaving would only be recorded as the time spent on the first two pages - 1 minute. Therefore overall visit duration and time on page metrics are not a completely accurate representation of user activity. However, for most websites other than those that receive very large numbers of single page visitors (blogs for example), this does not mean that they are not insightful metrics. Understanding that these measurement flaws are common across all platforms and businesses still allows visit durations to be benchmarked and viewed comparatively over time or against other organisations. Avinash Kaushik⁵ provides a detailed explanation and examples of this.

There are various challenges in relying solely on these metrics to provide insight into online engagement and behaviours. Projected indications of audience behaviour relating to interest and depth of engagement are merely those... projections. Just because someone visits particular pages of your website, how do you know they are interested in them? Also, just because someone has a particularly deep visit in terms of a higher number of pages per visit, does this make them more engaged? What if their intention was just to find something quickly and they got lost? Clearly these metrics, whilst useful as indicators of web engagement (particularly when linked to specific analytic-based audience engagement 'goals' such as newsletter sign-ups or completion of a transaction), cannot on their own tell a complete story.

Analytics data can tell you what your audience is looking at, and in some cases how they are looking at it, but it does not give you any insight at all into *why* they are doing it. Nor does it offer any certainty that your audience will continue to behave that way in the future.

Data become much more valuable when it can be combined with useful qualitative information from the audiences themselves. So is the answer as simple as asking the audience via an online survey? Well, not exactly. As many cultural organisations have found out, there are numerous challenges with gathering meaningful data via online surveys, such as:

- Knowing exactly what questions to ask
- Trying to overcome typically low response rates
- Addressing the inherent bias of responses reflecting only those who are prepared to complete surveys in the first place
- Seeking to understand how to utilise the information gathered in a meaningful way.

Analytics data can tell you what your audience is looking at, and in some cases how they are looking at it, but it does not give you any insight at all into why they are doing it. Nor does it offer any certainty that your audience will continue to behave that way in the future.

5 http://www.kaushik.net/avinash/standard-metrics-revisited-time-on-page-and-time-on-site/



7.2 What we heard from the experts

During one of our project workshops, Rob Stein, Deputy Director, Dallas Museum of Art presented recent research⁶ he had done whilst at the Indianapolis Museum of Art (IMA). He sought to link qualitative audience information in the form of online motivation with online behaviours as captured via Google Analytics, in order to begin to generate a more detailed picture of current online engagement for the IMA.

Drawing upon a large body of onsite museum visitor studies research, most notably by John Falk⁷, Rob explored the notion of the 'entrance narrative' which highlighted that museums, when analysing their visitors' behaviours, should not seek to segment them according to demographic information, which was too static an influencer of behaviour, but instead look at their motivations for walking through the doors of the museum on any given day, namely their entrance narrative.

Rob's own research sought to explore a similar concept of 'online entrance narrative', examining the reasons that online audiences visited the IMA website. His research identified 5 key motivation categories or entrance narratives for the IMA online audiences:

- Plan a visit to the museum
- Find specific information for research or professional purposes
- Find specific information for personal interest
- Engage in casual browsing without looking for something specific
- Make a transaction on the website.

Rob and his team created a simple one question online survey, hosted on the IMA website, which asked online audiences to self-identify with one of the five motivations described above. The research then sought to link up these online motivations with online behaviours (via the creation of Google Analytics segments based on the survey responses), seeking to understand how audiences, based on their declared motivation when arriving at the IMA website, actually behaved whilst using the website. This was done by interrogating various web metrics in GA.

By exploring behaviour against motivations in this way, a much more complete picture of audience engagement could be drawn that could not only indicate *what* an audience member was looking at online or *how* they did it, but also *why*.

This approach also addressed certain challenges with running online surveys. As a simple one question survey with a choice of answers required less investment of time for completion, it was more likely to get a higher response rate and would lessen (although not completely remove) the bias of answers coming from those people more likely to commit to a higher investment of time when completing surveys. Also, restricting the survey to one question focusses the attention of the cultural organisation on asking the most important question for them, whilst also giving them the flexibility to simply change it if necessary. Having the flexibility to link the survey response to Google Analytics to gather specific metrics also allows the survey data to be utilised more meaningfully by providing a mechanism for qualitative data to be combined with quantitative data.

6 Further details of Rob's research can be found at http://www.museumsandtheweb.com/mw2012/papers/exploring_the_relationship_between_visitor_mot 7 Falk, J. (2009), Identity and the museum visitor experience, Left Coast Press, CA

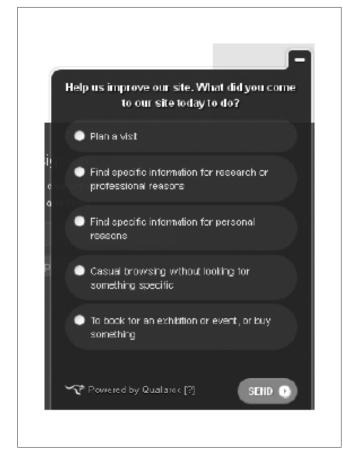


7.3 What we did

The group agreed to adopt a similar methodology towards understanding online behaviours more comprehensively.

From the period 11 November 2012 to 12 January 2013, the majority of project partners uploaded a single question survey using online survey provider Qualaroo⁸ which was placed generally on all pages of their websites in a bid to capture an individual's motivation for visiting that website on that occasion. The five motivational categories identified by Rob's research were adopted as the basis of this survey.

This survey sought to ask one simple question -What did you come to our site today to do?



Audiences were able to tick only one response. They were also given the options to click 'do not ask me again', whereby they would never encounter the survey again, even on future visits to the website; and 'not right now', which would hide the survey on all other relevant pages during the course of that visit itself but not any future ones.



There was discussion about whether the motivational categories identified and used within Rob's research were better suited to museum audiences and if they would be relevant to audiences across our group's wider cultural types (e.g. theatres and cross-arts venues). It was broadly agreed that there was a generic value to all cultural venues within the project (irrespective of type) of using the same set of categorised responses as these were grounded in strong research and would better promote comparative analysis across the group.

The one exception was REcreative, who as a slightly more unusual project participant being first and foremost a website for engaging with content rather than directly linked to a physical venue for visits, should deviate from the standard motivational response categories.

For them the 'planning a visit' category was replaced with a 'creating or responding to content' category. In addition some project partners slightly amended the wording of their motivational categories to better suit their audiences but only in a way that could still be linked back to the original five standard categories.

Once the survey was live, a visitor clicked on a particular motivation response which created a tracking event in Google Analytics⁹ that could then be analysed as a Google Analytics segment. That Google Analytics segment could then be analysed against various behaviour metrics, to provide useful data upon which to track online behaviour against online motivation.

At the end of the live survey period, Culture24 matched the relevant motivational category data from the Qualaroo survey tool with the relevant behavioural metrics data from each organisation's Google Analytics account. Project partners were then asked to review this data for their own organisations.

⁸ https://qualaroo.com/about

⁹ This is a major advantage of the Qualaroo tool and was a key factor in the decision to use it (offsetting the some of the limitations with it).

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Research challenges and limitations

There were various challenges in applying a uniform survey and analysis process across all project partners:

- Brighton Museum and Art Gallery was the only organisation unable to adopt the survey on its website, due to restrictions in making the necessary web coding changes and so could not be included within this analysis.
- The British Library was the only project partner that did not use Google Analytics (it uses comScore). As such the behaviour metrics could not be included in a comparative analysis with other organisations. However the British Library was able to do their own specific venue-based analysis in this regard.
- For Wellcome Collection, there were problems tracking the motivational categories as a segment within Google Analytics and so the metric-based behavioural analysis could not be undertaken.

There were also challenges with capturing certain types of data that would have been useful additions within the analysis but for various reasons had to be excluded. These included:

- A proposed exit survey of user satisfaction of website experience and usage against original entrance motivation could not be undertaken as the survey software did not support this; this would have provided an even more complete insight into the nature of online engagement by giving an indication of the **kind** of engagement (good or bad?), in addition to the existing examination that can be said to look at the **degree** of engagement
- Many partners were unable to track purchase or booking behaviours against the 'make a transaction' motivation because these sections of the website were hosted by third party platforms or specialised systems
- Within a web interface, Google Analytics only allows for reporting on four segments at a time, meaning that all five motivational segments could not be analysed in one go; therefore for the broader comparison analysis across participating organisations, the 'make a transaction' motivation segment was excluded (due to third party hosting issues), however organisations could still examine behaviours against this motivation segment individually within their own Google Analytics accounts

- Bounce rate had to be ignored as an indicative metric of behaviour in this analysis, as answering the survey question was interpreted by Google Analytics as a page-view-related event and so bounce rate for all survey related segments were artificially set to zero
- Visit from mobile devices were under-represented in this data, as most mobile visitors would not have been shown the survey due to limitations with the survey software at the time¹⁰; no meaningful examination of this data could be done based on mobile (which was unfortunate given other research strands of project).

There were also additional considerations regarding the interpretation and analysis of the data. These included:

- Self-identification is subject to the challenges of subjective interpretation of the motivational categories. For example someone who is visiting a website to purchase a ticket could self-identify themselves as 'planning a visit' rather than 'making a transaction'
- Only a two month data capture period was possible within the overall timelines of the project; ideally data would be captured over a longer period to mitigate the impact of seasonal variations (e.g. Christmas) as well as gather a larger amount of data from smaller venues to make analysis and insight more valuable.

Research strengths and benefits

There were also numerous benefits to the collaborative approach taken:

- Applying the survey concurrently to 20 different websites allowed for detailed, useful comparison
- The workshop format allowed for peer review and reflection
- It was a structured opportunity to focus and spend time looking at a complicated key issue
- There was access to expert advice and guidance from professionals, the shared budget for the research made this affordable.

10 Qualaroo updated their product in summer 2013 in response to the growth of mobile devices and the service is now mobile responsive.



7.4 What we found out

Survey results

The following diagram shows what proportion of audiences fell into each motivational group, per organisation, based on the survey responses. The organisations are listed on the vertical and the percentage of responses is listed on the horizontal. The colour codes represent each motivational category.

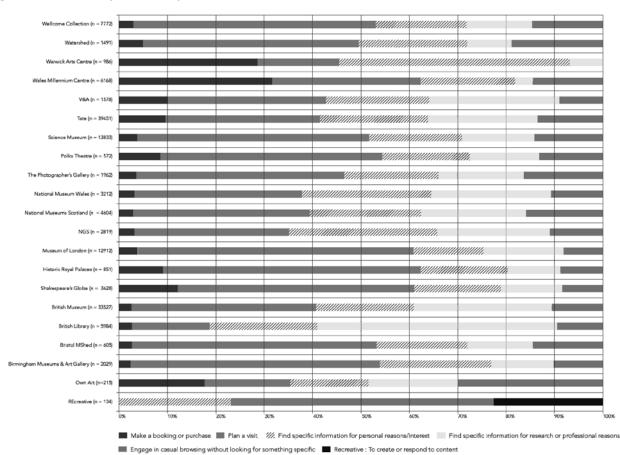


Figure 1: Summary of survey results for each venue

The percentage split per motivational segment across all organisations (based on the survey responses) was:

Motivational segment	% of survey responses
Make a booking or purchase	7.83%
Plan a visit	37.21%
Find specific information for personal reasons/interest	22.05%
Find specific information for professional reasons/interest	18.12%
Engage in casual browsing	13.71%
To create and respond to content (REcreative only)	1.07%



From a comparative perspective, it was useful to group similar organisations. This was done based on three categories: exhibiting venues, multi-disciplinary art venues and organisations without a physical venue.

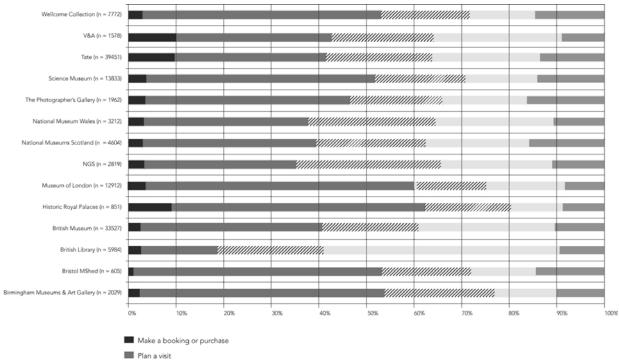


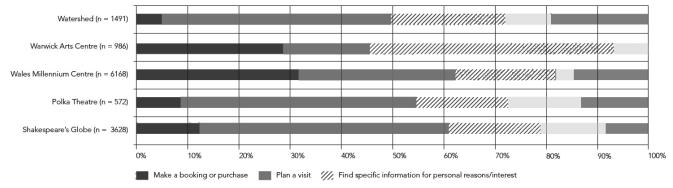
Figure 2: Summary of survey results for each exhibiting venue

111 Find specific information for personal reasons/interest

Find specific information for research or professional reasons

Engage in casual browsing without looking for something speific

Figure 3: Summary of survey results for multi-disciplinary art venues



Find specific information for research or professional reasons 📕 Engage in casual browsing without looking for something specific

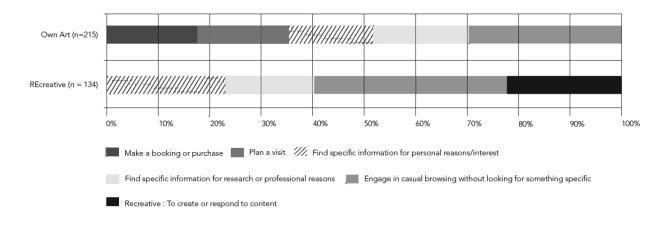


Figure 4: Summary of survey results for organisations without physical venues

Google Analytics results

We also produced comparative and grouped data on certain web metrics: average time on page, average visit duration, average pages per visit and percentage of new visits.

Due to limitations with Google Analytics the 'make a transaction' segment had to be excluded from these comparative results.

Average time on page (in seconds)

The following diagram shows average time on page, in seconds, for each motivational category for each organisation. The time in seconds is listed along the horizontal axis and as before the motivational segments are colour coded.

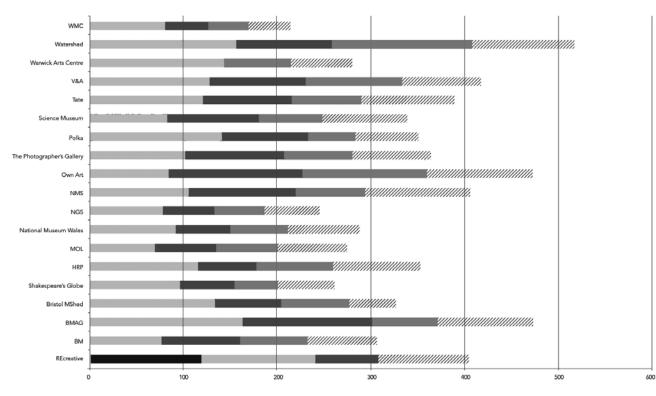


Figure 5: Average time on page, in seconds, for each motivational category for each organisation

To create or respond to content 🛛 Information for research or professional reasons 🔳 Casual browser 🔲 Plan a visit 🚧 Information for personal reasons



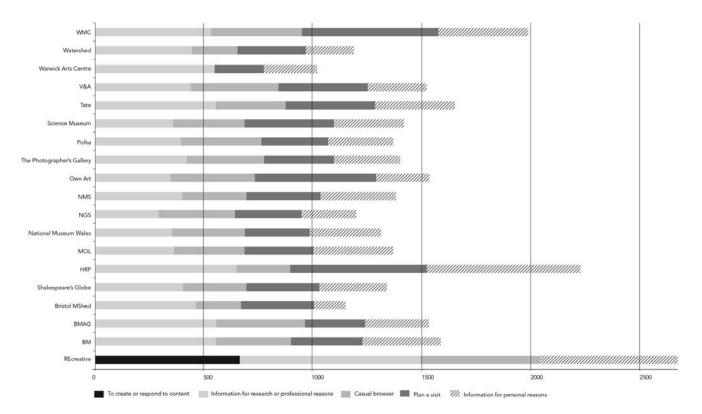
The average time on page, in seconds, per motivational segment across all organisations was:

Motivational segment	Average time on page (seconds)
Plan a visit	76
Find specific information for personal reasons	82
Find specific information for professional reasons	110
Engage in casual browsing	86
To create and respond to content (REcreative only)	118

Average visit duration, in seconds

The following diagram shows average visit duration, in seconds, for each motivational category for each organisation, with the average visit duration listed along the horizontal axis.





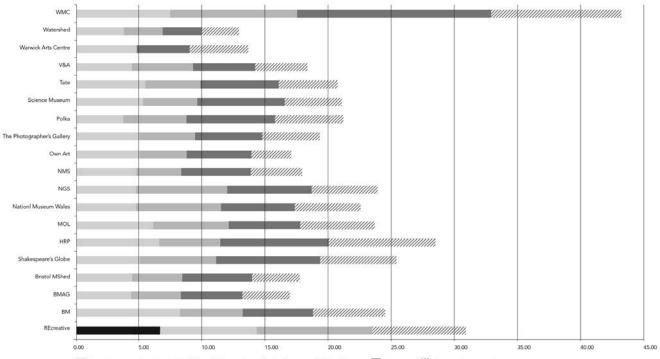
The average visit duration, in seconds, per motivational segment across all organisations was:

Motivational segment	Average visit duration (seconds)
Plan a visit	376
Find specific information for personal reasons	338
Find specific information for professional reasons	469
Engage in casual browsing	340
To create and respond to content (REcreative only)	665

Average pages per visit

The following diagram shows average pages per visit for each motivational category for each organisation, with the average pages per visit listed along the horizontal axis.

Figure 7: Average pages per visit, in seconds, for each motivational category for each organisation



To create or respond to content 📃 Information for research or professional reasons 📃 Casual browser 📕 Plan a visit n Information for personal reasons

The average pages per visit per motivational segment across all organisations were:

Motivational segment	Average pages per visit
Plan a visit	6.47
Find specific information for personal reasons	5.32
Find specific information for professional reasons	5.41
Engage in casual browsing	5.09
To create and respond to content (REcreative only)	6.56

7.5 What we learnt across cultural organisations

Planning a visit was the most popular category

The most popular motivation type across all the venues was 'plan a visit' with an average of 37% of the total survey respondent group selecting this. For the majority of organisations, this was also the most popular segment, with the Museum of London (57%) and Historic Royal Palaces (53%) having the highest percentage across their survey respondents.

Intuitively this feels unsurprising as websites often tend to be the first port of call for people looking for key venue visit information, directions, address, opening hours and so on. This finding is a valuable insight for cultural organisations seeking guidance on prioritising investment in certain parts of their website.

Confirmation that the majority of online visitors are looking to plan a visit would allow organisations to concentrate their efforts and resource on the needs of this group and the parts of the website they visit by doing further 'visitor flow' analysis. They could look at traffic referrals to see where audiences have come from as well as search terms to see if they are brand-related. Improvements in website design and content (e.g. relating to calls to action, marketing material and other key messages) could be strategically aligned to these parts of the site to better ensure reception and response.

It is necessary to highlight that the large proportion of 'plan a visit' motivated online audience members could have been partly caused by this category being interpreted too broadly, perhaps including those who are considering visiting at some unknown point in the future or, as was mentioned earlier, those who wish to purchase a ticket but choose 'plan a visit' rather than 'make a transaction'. More detailed investigations would have to be carried out by individual organisations to determine if this was the case.

Audiences who are planning a visit might be lost

The average visit duration and the average pages per visit of those seeking to plan a visit are higher compared to other motivation types. If audiences have such intent we might want them to get the information they need as quickly as possible with as few clicks as possible. Could it be that generally this is not happening and they are getting lost? If cultural websites are not optimising for the high percentage of 'planning a visit' users, are these visitors drawn to other content during the planning process? It could even be that many cultural websites are optimising for 'planning a visit' users, by ensuring there is relevant content available, but may not be doing it in an entirely audience-focussed way, not making that content as easily accessible as possible. It is impossible to say for sure but the research does allow us to shape a question which should be investigated further. This could be done by asking a follow-up question at the end of the study asking users to rate their experience of the website, or through institution-specific deep analysis of user journeys that was beyond the scope of this work.

Many organisations' websites are regarded as a professional resource

A large number of organisations within the project have websites that are used as a professional resource. In particular the British Library, British Museum, Tate, National Galleries of Scotland and National Museums Wales appear to have a large percentage of their online audience describe their visit as a professional one. This is unsurprising as many host significant digitised collections content or information about their collections that would invite professional interest.

These organisations would benefit from delving more deeply into this segment to see whether those visitors are residing primarily in the collection pages, or if they make it to other sections of the site that might host in-depth professional content. It would also be interesting for such organisations to examine their audience engagement strategies to assess whether this group is actively being sought after. Those organisations that do regard engagement with professional users as key in respect of their physical resources and space, may not be effectively engaging them with their online resources and so missing an opportunity (see example of Shakespeare's Globe on page 25)

Professional and research-driven audiences generally spend longer on websites

Audience members seeking out information for professional and research purposes spend the longest¹¹ of all motivational segments on web pages and on their overall website visit. This confirms a common belief that such audiences tend to consume, digest and reflect on online content in more in- depth ways.

However, as with the 'planning a visit' segment, there is an interpretive tension in this data that could at the same time point to poor usability, poor search, and poor information architecture unnecessarily slowing these users down. Further investigation needs to be done on an organisational level (including content analysis, visitor flow analysis and exit survey analysis) to better understand the visit behaviours.

Cultural organisations should become better at attracting and supporting casual visits

Our comparative analysis would indicate that casual browsers are generally not driven to visit cultural websites, with only 13.71% of survey respondents indicating this intent. Given their casual browsing nature, such visitors might be more inclined to spend longer visiting websites, potentially visit more web pages or spend longer on such pages. Yet our data demonstrates that this segment has relatively low metrics in these areas in comparison to the other segments.

Rob Stein commented that "attracting casual browsers was an underdeveloped online audience segment, particularly for museums, and thus a potential huge growth area".

Rob Stein, Deputy Director, Dallas Museum of Art

"It seems we know a few things about people's current online habits:

- Many people spend a lot of leisure time online. This might be shopping, reading news/blogs, watching YouTube videos...
- Most museums are not seeing those leisure-time visitors spending significant time on our websites.

I think this is because compared to other websites, museums don't tend to produce content in a way that's intended for leisure. With our backgrounds as cataloguing and reference institutions we tend to do a better job supporting specific information-seeking goals and a far worse job supporting general browsing activities. If you're visiting a museum website, without a specific goal in mind, you'll quickly find that there's very little to do.

Museums DO however create a lot of content, but I think we do a poor job of packaging that content in a way that can support browsing. More often than not that content ends up being distributed to other sites where browsing is done (i.e. YouTube, Flickr, Pinterest, etc...) This is not bad, but if this is the strategy we want to pursue, then we need to get better at including tracking data in those sites that can tell us about casual use of our content. Another opportunity to support browsing exists in the way we present our online collections. Most collections are searchoriented, meaning that if you have a specific search question in mind we can generally do a pretty good job of delivering you results that are good. If - on the other hand - you don't have a specific question, or cannot phrase a question in the way we've catalogued our data - then we're terrible. Browsing in museum websites today amounts to flipping pages of an endless book of objects and not much more. I think there is a lot of room to experiment with user interfaces that can give us a better experience of exploring a collection we're not familiar with yet."



11 with the exception of the REcreative

To keep up with this trend, some cultural organisation websites are beginning to take on a more casual magazine-style approach to become better at delivering information and supporting repeat casual use. The US based Walker Art Center¹² web redesign in 2012 has tried this approach to much acclaim, even garnering a nomination for a Webby People's Voice Award.

Of our project partners, it was clear that some (e.g. REcreative, Own Art, Watershed, and The Photographers' Gallery) drive casual visits more than others, although of these it was REcreative that also promotes longer and 'deeper' visiting of this segment. Being an online initiative first and foremost this is unsurprising but there is much for other cultural organisations to learn from the approach of Walker Art Center and REcreative if the trend towards casual browsing continues.

It is also possible that the under-representation of casual browsers is because people cannot find these websites through general subject searches. The Phase 1 Let's Get Real report demonstrated that cultural organisations had a significant problem with online attention share generally and that contemporary SEO strategies were not being pursued enough. This could lead to problems with discovery from this group of audiences.

7.6 What we learnt by going deeper

A comparative analysis of the data across organisations can only tell us so much. For this exercise to have real value for project participants, a deeper analysis of the data by each organisation needed to be carried out and validated against their own organisational engagement strategies, target audience behaviours and website purpose.

To assist with this Culture24 generated further data from individual Google Analytics accounts of each organisation, connecting the motivational segments to metrics related to content, search and traffic sources. Coupled with the comparative data generated earlier, this represented enough relevant data to enable each organisation to begin to undertake a meaningful analysis of behaviours versus motivations for their organisations.

However, simply offering up this data to these organisations was not enough as they could only make sense of the data when used as a source for answering certain key questions about engagement. To help each organisation begin this process, Culture24 provided all organisations with a starting list of questions that would enable them to better interrogate the data for their own specific purposes. The questions given to each organisation to consider were:

1. Which segments are the most 'engaged'? (Look at Average Visit Duration, Average Time on Page, Pages per Visit, % New Visitors)

2. How 'engaged' are my visitors (per segment) compared with similar venues?

3. What are the top 10 content pages per segment? (Rank your top 10 pages according to number of visits, time on page). Are the results what you'd expect for that type of visitor?

4. For your key segments, what is the visitor journey through the site? (Look at the Visitor Flow report in the Audiences section of Google Analytics)

5. What are the most popular exit pages per segment? Are the exit pages for each segment what you'd expect them to be? 6. What are the most popular landing pages per segment? Do they align with any marketing, content strategy or SEO activity as expected?

7. Who are the top 10 main referrers to your site for each segment?

8. What is the traffic type per segment?

9. Which visitors are more likely to use search during their visit?

10. What do they do afterwards?

11. Which segments are more likely to have searched for your venue/brand name to find your site? How does their behaviour compare to people who arrived via more generic search phrases?

12. Are there any search terms that should lead to engaged visits but do not?

13. Are there transactions that interest you? Whether signing up to a newsletter, going to a donate or ecommerce page, etc. What percentage of people make it through the whole transaction? Are there any key points where you seem to lose people?

14. Is 'Plan a visit' local, national or international? Do behaviours for this segment vary by location?

15. What kinds of pages or site sections do people looking for information for professional or research reasons visit the most?

16. What does this tell you about who they might be?

17. Who looks at your collections online?

18. Who looks at learning resources?

19. Who signs up for your newsletters or looks at pages about your social media?

20. Which segments look at jobs or volunteering pages?

12 http://www.walkerart.org/



21. How many other sections of the site do 'Plan a visit' people look at? Do they look at them before or after they've looked at visit planning information?

22. Who are more likely to be repeat visitors? (Within the survey respondents and overall?)

23. What impact does social media have on online behaviour? Do people behave differently when they've come to your site via your own social media or others?

24. What differences have you noticed between the behaviour of 'casual browsers' compared to people looking for specific information for personal or professional/research reasons?

Project participants used some or all of these questions to examine online visitor motivations versus behaviours for their own organisational websites. Key reflections from this organisational specific analysis are detailed here. Please read these reflections not as hard conclusions that can be applied to your own websites and organisations, but rather as example case studies in digging deeper into online audience data.

REcreative Sarah Cofflis

(REcreative is an online community and resource built as an educational platform for young people by the South London Gallery in collaboration with Tate, Whitechapel Gallery, Royal Academy of Arts and the Hayward Gallery).

'Casual browsing' is the main reason why people come to our website, which is unsurprising as one of the website's main aims is to become a space to browse for inspiration. However the segment that is most important to our venue is the 'to create or respond to content' segment that was specifically created for us, as we believe this reflects REcreative's main 'unique selling point' (USP).

Our analysis showed that this segment is the least engaged with the resources section of the site (specifically the film/curated content). We'd like to see a greater interaction between this segment creating their own work and using the information from the resources section to support individual practise.

'Finding specific information for research or professional purposes' (in REcreative's case this was worded as 'finding something specific for work/school/college) is the least popular reason for a visit. We'd like to see this go up and we've recently made some changes to the site which might help with this.

We'd be keen to repeat this exercise in a few months' time to see if this has gone up.

In addition those people coming to the site to find something they are personally interested in are also a key audience for REcreative. Currently the 'personal interest' segment lies higher than that for 'information for work/school/college'. This is interesting to us in order to register how playful the site is in comparison with other education platforms."



Shakespeare's Globe Jack Harris

"It is interesting to look at these segments and find detailed results for specific types of audience rather than simply seeing theatre splashed everywhere. It seems to show the lack of visitors coming for professional and research reasons and our resources being very under-seen. Our mission is to be the first point of reference for the study and appreciation of Shakespeare in performance, which could be reasoned to be 'plan a visit', but we could also be under-performing online on the professional side, where offline experiences perform very well. Definitely lots of food for thought."





Historic Royal Palaces Tim Powell

"The segments that are most important to our venue are the 'make a booking' and 'plan a visit' segments. However we know from this analysis that the 'make a booking' segment appears also to be underperforming as their ticket purchase journey shows a high exit rate at the beginning.

The potential future growth segments are those 'looking for information for personal reasons' and 'casual browsers' as they potentially represent people who are interested in our content that we could engage with more. We could explore opportunities to better attract these segments to continue their engagement with us by surfacing 'call to actions' such as signup for our newsletter or follow our social channels etc, on pages they visit.

Nearly 9 pages per visit for the 'plan a visit' segment seems very high. What we need to know is whether these visitors are finding what they need/want, and are getting immersed (in a good way) in our content - or are visiting so many pages because they can't!

Although ultimately this exercise was inconclusive for us, it forced us to look deeper at the stats and appreciate 'what we don't know'."



Amgueddfa Cymru - National Museum of Wales Dafydd James

"As the data from this survey shows, most people come to our site in order to plan a visit; therefore we would like to research how to promote exploration of more in depth content for this type of visitor.

We notice that the key exit pages from those who answered 'plan a visit' on the survey are from 'visit' pages. We would like to add in links to content pages to get more people to extend their visit and learn more about the Museum and its collections.

The Museum ran an additional survey in parallel to gather data on users of its Welsh domain name. A comparison of the results showed that the Welsh domain users were looking for more in-depth information (professional and personal), whilst the English site saw more activity for planning a visit. This could suggest that Welsh language users are looking up professional information based on the Museum's work with other public bodies - for example, standardising Welsh words for uncommon curatorial and research vocabularies and glossaries.

From our analysis of search terms being used we also noted the prominence of the keyword 'Dinosaurs', despite our lack of fossil records in Wales. Are we missing an opportunity with these non-specific searches by not providing general information or links to relevant sources?"



Warwick Arts Centre Will Thomas

"Those looking to book an event spent 'just' 3min 14sec in an average visit. This raises an interesting question regarding engagement and e-commerce – is a modest visit duration a sign of an expedient transaction process, or an unengaged audience? It would be useful to compare customer visit durations with e-commerce statistics.

These results also show that organic search is a more common traffic type for booking a ticket and finding information about a visit. Perhaps unexpectedly, email plays a significantly more important role for those looking for information for personal reasons (one would expect it to feature more prominently amongst those looking to buy tickets), whilst in a more predictable pattern, referrals are more common amongst those looking for information for professional reasons. It is interesting to note that in a comparison with Watershed (our closest organisation in terms of 'fit'), they pull in a very respectable proportion of returning visitors and get users to spend a lot of time on each page and in their visit overall.

However, they also have the lowest number of pages per visit. The conventional wisdom would suggest that the higher the number of pages per visit is, the more engaged users are. But what if the opposite is true – what if a relatively low number of pages per visit indicates a very well organised site with deeply engaging content? And what does it say about buying habits, and the way in which marketing messages on a site may or may not influence the audience coming to the venue? Perhaps web-browsing is more idiosyncratic and reflective of a venue's audience motivations than this survey can analyse. Combining this survey with more qualitative data about why an audience likes (or does not like) visiting a venue might yield more interesting results about browsing behaviour."





7.7 Understanding web behaviours - what we recommend

Keep asking yourself - what are the most important goals for my organisation that my website helps people accomplish?

Only by doing this can you begin to understand what the desired behaviour of your target audience is. Also consider if your website should be helping people accomplish other things than it is intended for currently in order to better align with your broader goals. Specifically, consider if your website's primary focus is to provide information for specific audience needs and if so what are those needs?

Don't just ask what your audience does on your website or how they do it, but also why

Relying solely on web analytic metrics as a complete indicator of web behaviour is insufficient. Supplement with some form of meaningful qualitative analysis that can provide a more complete picture. Consider entrance surveys to assess online audience motivation (or entrance narrative) and exit surveys to assess satisfaction levels and reasons underpinning this. You could adopt a one question (or minimal question) online survey as a method to do this. Such surveys can be easily adaptable, non-intrusive for the user and generally mitigates the challenges of running online surveys.

Learn to love segments in analytic tools

Segments allow you to work out which existing web behaviours represent a positive outcome for your organisation. They need to reflect the things that are important to your organisation and as such are more useful than headline web metrics. Trying to work out the high priority organisational goals linked to your website, and the key audience motivations for visiting your website only really becomes useful if you then segment by people who've achieved these goals. Segments will allow you to look more deeply into existing behaviours using various web metrics and therefore understand what behaviours represent a positive outcome for your organisation.



Prioritise your design and content decisions based on the patterns of audience behaviour you want to have on your website

Key calls to action (e.g. donating funds), opportunities for continued engagement (e.g. signing up to newsletters) and vital marketing promotions (e.g. show of the week) are all examples of priority content that can potentially reach your target audiences by placing them within areas of your website most commonly visited by those visitors. Don't assume that visitors will act on their first visit – give them time and understand the impact of repeat visitation on online goal completions and transactions.

Keep reviewing your audiences' web behaviours to better understand and act on changes

Web behaviours evolve rapidly. By adopting a process of benchmarking and continued regular measurement you will begin to understand trends and patterns of change in these behaviours, allowing you to better respond to them. You should also keep reviewing your target audience goals and motivations to assess if these could have changed in connection to your website.

Make it a priority to be able to access analytics data from any third party ticketing websites or systems you may use

Many of the project group were unable to track relevant behaviours in connection to tickets purchases or bookings which represent key organisational goals. This represents a massive strategic knowledge gap for the organisation. Resolving this, perhaps through renegotiation of supplier contracts, should be a priority.

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8. Understanding mobile behaviours

Chapter summary

Mobile benchmarking analysis was undertaken across the group to assess if data backed up the perception that audience behaviours were changing dramatically as a result of the increasing use of mobile web devices.

In addition, the need for organisations to closely analyse the detailed web behaviours of their mobile audiences in order to better serve them was identified, with suggestions outlined as to how they may go about doing this. With increased tablet and multi-device usage meaning that organisations might begin to pour all their efforts into building responsive websites, Seb Chan, Director of Digital and Emerging Media, Smithsonian Cooper-Hewitt, discussed a possible analytics implication of responsive websites with the group.

8.1 Background

The increasing use of mobile web devices such as smartphones and tablets is strikingly apparent with more smartphones being sold than personal computers since 2011, whilst tablet sales are predicted to surpass laptops this year (2013) and all personal computers in 2015.¹³

Yet mobile is not just about technology, it is about audiences, and the rise of its use means that audience behaviours are also changing rapidly. We are all probably aware of our own changing behaviours on mobile devices, particularly relating to an increase in web browsing from these devices. What users do, and are capable of doing, on different sized devices in different contexts, is radically different. Organisations should not expect mobile users to necessarily behave the same way as if they were using another device or were in an office. This requires continuous design research. We were interested in doing some mobile benchmarking across the group to see if the data backed up this perception and to illustrate the urgent need for organisations to develop mobile friendly websites if they hadn't already done so. We also briefly analysed useful methods for tracking mobile behaviours on websites more specifically.

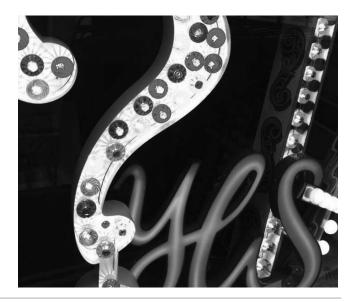
8.2 What we did

By running reports from the Google Analytic accounts of each organisation (where possible), we benchmarked what percentage of audiences were accessing their websites via mobile and how fast this was growing.

How many people are visiting websites from mobile devices?

This analysis was run twice during the project, the first was conducted in early September 2012 and covered data relating from January 1, 2012 to September 2, 2012.

The second was conducted in early May 2013 and covered data from January 1, 2013 to April 30, 2013.



13 http://www.idc.com/getdoc.jsp?containerId=prUS24129713

⁻ also BBC statistics about mobile/tablet traffic: http://www.journalism.co.uk/news/bbc-news- mobile-phone-traffic-milestone/s2/a553643/



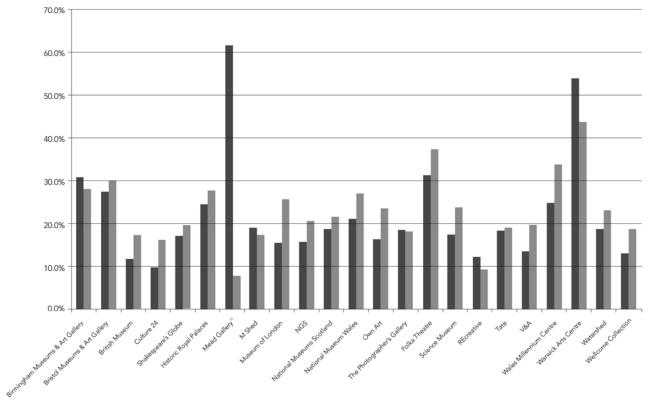


Figure 8: Comparison of % mobile visitors (from mobiles and tablets) for 2012 and 2013¹⁴

% mobile visitors (including tablets) January 1, 2012 - September 2, 2012

The results as described in the chart above show that on average across these organisations, 20% of visitors to these websites came from mobile-web devices.

The group felt strongly that 20% represented the key tipping point for any organisation to begin to proactively act on the relationship between mobile web audiences and their websites. It was felt if an organisation had more than a fifth of their audiences visiting their website from a mobile device without it being optimised for mobile traffic, then they would have a massive problem.

A recent Google study demonstrated this by identifying that 50% of those audiences interviewed said that even if they like a business, they will use them less often if the website isn't mobile- friendly.¹⁶

🔳 % mobile visitors (including tablets) January 1, 2013 - April 30, 2013

How fast are visits from mobile devices growing?

From the Google Analytic accounts we produced reports to demonstrate the velocity of change in mobile and tablet visits across equivalent periods in 2012 and 2013.

15 Mead Gallery is part of Warwick Arts Centre

16 [Source: http://www.google.com/think/research-studies/what-users-want-most-from-mobile-sites-today.html)

¹⁴ This graph combines visits from mobiles AND tablets. Since the initial generation of the 2012 figures for the group in September 2012, Google Analytics has added functionality that allows users to segment tablet audiences separately (see figure 9 which demonstrates this). To retain comparative ability, tablet users were not separated out for the purposes of this graph. It is however recommended that organisations seek to segment separately per device type where possible, as well as regularly keep up with changes in functionality in Google Analytics more generally.



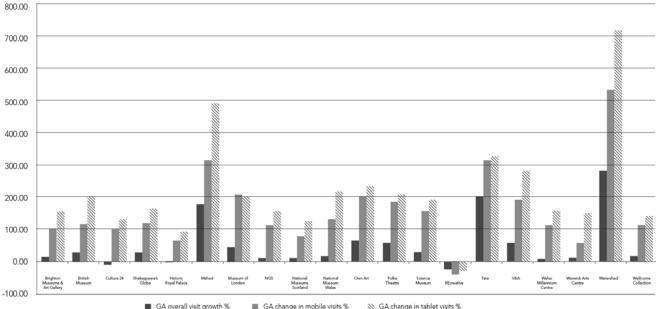


Figure 9: % growth in mobile and tablet visits (Jan to April 2013) compared with the same period in 2012

GA change in mobile visits % SA change in tablet visits %

Whilst these figures have certain limitations based on some difficulties gathering the data effectively, they clearly demonstrate the sharp growth in visits from mobile with an average increase of 158% and an even higher increase for tablets of 216%.

The figures also back up the general perceived rise in the use of tablets. This was referred to within the project discussion as the impact of the 'tablet Christmas' and was being reported on by the likes of GOV.UK and BBC. The BBC themselves found that requests for its iPlayer services from tablet devices nearly doubled between November 2012 and January 2013¹⁷.

The velocity of change in mobile web visits indicates that even if organisations are not quite at the 20% tipping point, they will be by the end of the year. This inevitability exacerbates the need for all cultural organisations to examine their mobile and tablet visit statistics as a matter of urgency and to respond rapidly to the needs of these mobile audiences.

Looking at mobile behaviours more closely

Whether or not an organisation has developed a mobile friendly website, it is vital for them to examine closely the behaviours of their mobile audiences. This can ensure they keep up with changes, respond to them, quickly identify 'pain points' for mobile users and help prioritise the parts of their websites that need urgent reconfiguring.

Google Analytics has built-in mobile and tablet segments, so organisations can easily explore how visitors from these devices behave. It is important to understand the differences between users of different devices - and also realise that these may represent, in some cases, the same people with multiple devices. For example, a parent may use a desktop computer or tablet to research a trip to a museum, and then check opening hours and directions on a smartphone whilst travelling to the museum, and again use their smartphone during a visit to look up further information to explain to their children.

Differences between devices matter. It is helpful to have the default 'all visits' segment switched on too, to see if there are any places where mobile and tablet visits start to drop off more sharply than normal visits (e.g. if they're wondering where the pain points for such visitors are). Do they lose mobile visitors when they have to do some data entry, or do they persist? Do more people on mobiles or tablets drop off at transactional pages more than other visitors? What do mobile visitors search for? How do they navigate around the website?

Organisations should explore these behaviours in light of their website goals in order to determine whether the website is doing its job for these mobile web audiences. To enable this they should consider which of their website specific goals are relevant to mobile audiences and analyse these mobile segments against these to see if they convert.

'Macro conversions' is a term used to refer to visitors completing the main tasks organisations want them to do on their website e.g. buy a ticket or product, sign up to a newsletter. 'Micro conversions' on the other hand are when other smaller goals of a website are

¹⁷ http://www.theguardian.com/media/2013/mar/04/bbc-iplayer-tablet-viewing?view=mobile

Culture24

achieved e.g. looking up visit information, sharing on a social network or downloading educational material. Organisations should not only focus on macro conversions when looking at mobile behaviours, as the micro conversions may become more relevant to a user accessing the website whilst mobile. For example a visit to the 'how to get to us by public transport' page may not be the main task the museum wants its audience to perform on its website, but it becomes particularly relevant to a mobile user who may be looking up those details having set off on a visit. Looking at the conversion rate for mobile vs. non-mobile visits would demonstrate if this action is particularly painful for a mobile user.

For a practical case study of a deeper exploration of the mobile behaviours of audiences on websites please refer to the National Galleries of Scotland research experiment example in Chapter 10. As we have seen analytics data can tell you what people are looking at but not why. Organisations can think about behaviours that signify conversion but should understand that it's not a perfect measure. In order to supplement this, organisations should also consider some form of qualitative analysis, i.e. one question online surveys that are viewable only on mobiles.

Building responsive websites for mobile/ tablets

With increased tablet and therefore multi device usage, should organisations start pouring all their efforts into building responsive websites? Whilst this question was not explored specifically by this project, Seb Chan, the Director of Digital and Emerging Media at Smithsonian Cooper-Hewitt, National Design Museum in New York discussed a possible analytics implication of responsive websites with the group.

Seb Chan, Director of Digital and Emerging Media, Smithsonian Cooper-Hewitt

"In the first Let's Get Real project participants were introduced to a variety of heat-mapping tools to help understand the granular details of user interactions on particular pages on their websites. Whilst these tools have functioned well in the world of desktop web browsers and separate mobile- specific websites, they start to come unstuck for more contemporary responsivelydesigned websites.

Ethan Marcotte coined the phrase 'responsive web design' in 2010, describing it as a solution for the multiplicity of browsers, screen sizes, orientations, and general device diversification. Marcotte¹⁸ writes: "Fluid grids, flexible images, and media queries are the three technical ingredients for responsive web design, but it also requires a different way of thinking. Rather than quarantining our content into disparate, device-specific experiences, we can use media queries to progressively enhance our work within different viewing contexts." It is important to understand that this isn't 'just a mobile problem'. It is a challenge brought about by tablets, table top computers and web TVs, as well as the varying types of pocket-sized mobile device. It will only intensify with more embedded screens and networks in our environments.

This fluidity plays havoc with heat mapping tools, and can also cause issues for general web analytics methods too. If interface elements move around the page depending upon the size of the user's browser thus rendering tracking of mouse/finger clicks useless, we need to look to other solutions. This re-emphasises the importance of a task oriented approach to analytics and a deep dive into considering 'what is the user trying to do?'.

With the current suite of tools available one option is a segmenting of user data by screen size or orientation as well as by device. Be aware, though, that screen size is not always a good proxy for 'viewport' - which refers to the viewing window the browser provides. A user on a 1920px or higher width screen will rarely have their browser running at full screen.

For basic analytics, it will be important to be able to distinguish behavioural differences between users with different sized screens, and if possible, viewports. Are there certain parts of your website that users on smaller or bigger screens find hard to complete tasks on? Are there certain parts of your website that attract more small screen users than others? How long are your users willing to browse your site on large/small screens? These are just a few of the questions you may need to track answers for.

If actual click tracking is required then more complex Javascriptbased solutions will need to be implemented where the browser viewport size is detected and click data collected accordingly.

For the technically adept organisations, Henry Zeitler¹⁹ provides some code for Google Analytics to do this.

Bear in mind, too, that users on different devices and in different use contexts (on the go vs. deskbound) also will begin their visit journeys in different ways. Your organisation may have worked hard on its SEO several years ago but the results may be very different when searches begin from a mobile device. State of Search²⁰ provided a useful checklist for mobile SEO in early 2013."



18 Marcotte, 2010 - http://alistapart.com/article/responsive-web-design)

19 http://maigruen.netzkern.de/responsive-web-design-and-google-analytics-introducing-responsive-tracking/

20 http://www.stateofsearch.com/mobile-seo-audit/

8.3 Understanding mobile behaviours - what we recommend

If 20% or more of your online audience is visiting your site via mobile devices and you don't have a mobile-friendly site, you need to address this as a priority

Be careful to ensure that your site is able to deliver a good, usable experience that fits and scales well across differently sized devices as a smartphone view on a tablet is almost as frustrating for a user as a desktop view on a smartphone.

Track visits from mobile devices, separating out mobile phones and tablets and keep a close on eye on differences, and how those differences are changing over time

This is a quickly evolving environment and understanding the speed of change for your users will help you prioritise responses. Consider the tools that you may need to better understand mobile and tablet users Culture24

Ensure that any new technologies you deploy on your websites such as survey tools, heat-mapping tools, or even new e-commerce features are optimised for mobile too.

Focus on micro conversions as well as macro conversions when seeking to understand mobile behaviours

A successful outcome for a mobile audience on your website might relate to achieving other, smaller website goals than your broader organisational ones. Organisations should not only focus on macro conversions when looking at mobile behaviours, as these other, micro goals may become more relevant to a user accessing the website whilst mobile.





9. Understanding social media behaviours

Chapter summary

Investigations were carried out across the project group to explore existing organisational approaches seeking to engage the social media behaviours of audiences, as well as examining tools, metrics and methodologies needed to better understand these behaviours.

Organisational analysis was therefore undertaken reviewing social media strategies, investment expended, platforms used and obstacles faced. A review of existing social media metrics, a qualitative analysis case study and an updated examination of social media as a referrer to websites were also carried out.

Key reflections from this analysis were then identified, alongside the development of a 'Social Media Evaluation Framework' to help organisations better determine their strategic and practical direction of travel in this area.

9.1 Background

Social media channels have increasingly driven change in audience behaviours. But does this mean that to engage these behaviours cultural organisations need to have a presence on lots of social media channels all of the time? As more channels become available and audiences begin to use them in different ways, this becomes increasingly impossible. Moreover what does having a presence really mean?

To better understand their necessary direction of travel, organisations need to understand the social media behaviours of their existing and target audiences and which channels they prefer. They are increasingly presented with a whole host of tools, metrics and methodologies that can begin to explore these with but which are the right ones to choose? How useful are some metrics for a particular organisation's need? What do existing methodologies not tell them? Which approaches work better at engaging key behaviours than others? As a group we were interested in unravelling these questions and challenging the value of investing heavily in these areas.

The analysis conducted in this area was performed by Elena Villaespesa, in collaboration with Culture24 and the project group. The findings form part of Elena's PhD studies at the School of Museum Studies, University of Leicester. Elena also supported the Phase 1 research in 2011, and is now employed by Tate in a newlycreated post focusing on web analytics.

This chapter seeks to summarise the key actions and findings relating to social media behaviours for the purposes of the project. A more detailed exposition of Elena's investigations and full research findings are detailed in Appendix 1.



9.2 What we did

Social media strategic review

A brief social media strategic review was conducted across all organisations. This sought to identify relevant factors in the organisational approaches to social media across the group. These included:

- A summary of each organisation's social media objectives
- Details of the various social media platforms used
- A comparison of the investment made (in terms of time and resource) towards social media objectives
- A summary of the challenges faced when measuring social media.

Social media metrics review

An exploration of social media behaviours in connection to common social media metrics was undertaken across the group. This was done in two main ways, firstly as a benchmarking exercise to seek to identify trends across the group, and secondly as a deeper exploration of each organisation's own data by themselves, followed by further discussion across the group around the most useful metrics.

Qualitative analysis case study

Deeper qualitative analysis was undertaken of perceived engagement relating to social media content. This sought to examine on the one hand how cultural organisations are using social media by looking more closely at the message, objectives and the type of activity; and on the other, examining audience responses by analysing the type of responses generated, depth and sentiment. Due to the time intensity of this task it was conducted as a 'museum case study' only but the process and findings have a wider relevance to all cultural organisations.

Exploration of social media as a referrer to websites

Following on from Let's Get Real Phase 1, further analysis of audience behaviour in terms of usage of websites from social media channels was explored to see if this had changed significantly. Therefore analysis was carried out across the group of the volume of web referral visits from social media, as well as a more detailed examination of the web behaviour of social media audiences, using Google Analytic metrics as well as the creation of a dashboard.

Development of a 'Social Media Evaluation Framework'

In response to the other key learning from the overall analysis of social media behaviours, a suggested social media evaluation framework was produced as a key outcome. This summarises the relevant social media measurement methodologies, metrics and tools that organisations should consider using when investigating social media behaviours, and relates these to various relevant organisational goals.

9.3 Understanding social media behaviours - what we recommend

Culture24

Use the Culture24 'Social Media Evaluation Framework' (see Figure 10) to help you meaningfully interrogate your audiences' existing social media behaviours against your organisational goals

Choosing the right metrics and methodologies is one of the main challenges for organisations seeking to analyse the social media behaviours of audiences against their various organisational goals. The lack of definition of standard metrics represents an obstacle for social media teams to demonstrate the value of their activities and for senior management to understand the results and to make decisions based on this data. Furthermore, getting the right set of tools to report the data represents another immense difficulty, as data needs to be collected from different sources and again, each tool has its own metric definitions.

This Social Media Evaluation Framework offers a way to navigate these obstacles by summarising the relevant social media measurement methodologies, metrics and tools that organisations should consider using and relating to their organisational goals.

The framework lists the main social media objectives at the top (e.g. community) and examples of standard metrics below (e.g. size, demographic segments etc.) to illustrate what and how to measure. Depending on the strategic objectives, the evaluation framework needs to be defined choosing the most appropriate metrics.

This is a guide to frame the objectives and select metrics but not a definitive list of social media metrics. Since there are many different social media strategies, the success of each one of them should be measured with a different set of metrics.

Consider if driving social media behaviours is the best way to achieve your organisational goal

Just because social media channels exist does not mean that you have to use them. Think about how they help you to deliver your key goals. If you are measuring social media behaviours are they allowing you to answer your organisation's most important questions? Project participant: "I would say no one is asking the right questions! No one is sure what they want to find out from it, therefore we are not monitoring anything regularly as the questions are not being asked."

Remember social media is not free

Engaging audiences on social media takes significant time and resource. Moreover none of this effort or expenditure becomes worthwhile if you have no effective method of measuring the impact. But measuring impact also takes time and resource. Eighty-six percent of project partners identified lack of time and staff resources available to measure the impact of their social media activities as their main challenge.

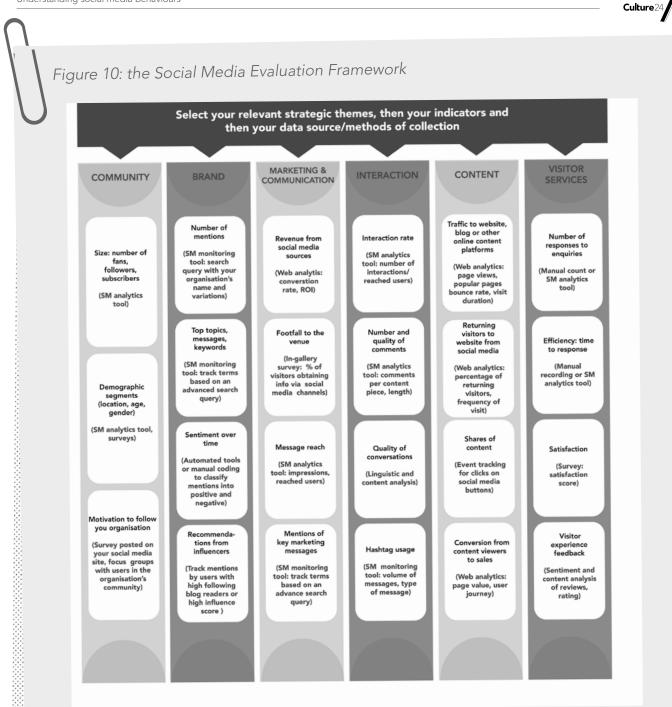
So it is critical to know that while social media may feel like a cheap, efficient opportunity to reach audiences, to do so effectively requires significant investment. Organisations need to make clear return on investment (ROI) decisions when determining their social media activities and strategies. Remember that simply 'reaching audiences' is not enough and with increased reach comes an increased expectation of service and engagement.

Use interaction and virality rates as a way of evaluating which social media posts users like to engage with

These rates can help monitor and evaluate the 'success' of social media posts, and represent useful measures when understanding what type of content drives higher engagement

Project participant: "The interaction rates are very interesting as they tell a different story from the basic visit data, a story that we need to understand more. Interaction rates could have an effect on how we structure posts in the future and more broadly, we need to consider a more strategic approach to social media activity."

The lack of definition of standard metrics represents an obstacle for social media teams to demonstrate the value of their activities and for senior management to understand the results and to make decisions based on this data.



How to use this framework:

1. Choose the main objective that links to your own strategy e.g. Interaction: Increase participation on Facebook posts

2. Select the standard metrics for each strategic area based on your specific objectives e.g. Interaction rate

3. Define the exact formula, coding scheme or valuation rate based on the social media platform e.g. Engaged users/Reached users 4. Set the reporting and analysis frequency e.g. Weekly/Monthly

5. Choose the tools for the data collection and analysis from the Culture24 list of tools²¹- e.g. Facebook Insights

6. Start reporting and sharing the intelligence internally

21 http://weareculture24.org.uk/projects/action-research/

Using imagery in your social media posts will drive audience comments and response

With the growth of image-based platforms like Instagram, Pinterest or Flickr, visual content is increasingly playing a key role in engaging users on social media platforms. We identified that the presence of imagery in the group's social media posts significantly impacted on their popularity.

Use qualitative analysis to interrogate more deeply the 'quality' and 'sentiment' of conversations taking place on your social media channels.

Quantitative metrics do not tell the full story; numbers tell us what is happening but not why. Adding qualitative metrics to the measurement mix will provide a different perspective on analysing social media behaviours by adding context to the numbers. A more in-depth qualitative analysis of a sample of social media posts and their interactions can significantly increase the understanding an organisation has about what activities are working to engage audiences, rather than simply drawing on numbers.

Since this is a very time-consuming analysis the best way to narrow it down is by selecting a sample of messages on social media or a single campaign, marking their objectives, categorising the different type of activities and finally, measuring the most helpful metrics.

If your primary objective for using social media to engage audiences is to drive them to your website – think again!

As noted in Let's Get Real Phase 1 and reconfirmed in this project, social media only represents a small percentage of traffic to the website compared to other sources. Behaviour patterns of social media audiences that do visit websites demonstrate (through high bounce rate and lower time on site) that most arrive directly to the content they are interested in and do not continue their visit thereafter, possibly choosing to further continue interacting with content via social media channels.

Project participant: "We now have some further evidence that tells us our social media activity isn't all about referrals back to the website (because if they do happen to link back - and only a tiny proportion do - most drop off immediately), therefore our strategy should be focussed more around increasing our visibility (brand awareness) and providing people with useful and appropriate material and messages, rather than driving visitors back to our sites."

Remember that audience engagement with your organisation also occurs outside of your own channels

The analysis of traffic to the organisations' websites brought surprising findings on how content is shared by audiences. Brand mentions and conversations around a hashtag occur beyond the organisation's own wall or feed. These are activities initiated by the users and not by the organisation. Understanding how content is distributed across social media, beyond the usual organisationavl channels, gives a truer indication of its relevance. Therefore finding these stories and tracking and analysing their reach helps better demonstrate the value of this content to audiences.





10. Conducting individual research experiments

10.1 Background

As the project ran its course through the various workshops, research tasks and group discussions, four key observations came to inform the final project tasks. These were:

1. Greater insight on digital engagement is achieved when each organisation decides what it means for them given their own organisational goals, needs, constraints and knowledge

2. Organisations need to make better use of available data to help drive these decisions

3. Organisations would benefit from running their own practical investigations towards this

4. Organisations currently lack a framework that could help guide and structure these investigations.

Taking these observations on board, Culture24 decided that it would be a valuable exercise at the culmination of the project for participant organisations to run their own short individual research experiments. This would allow each organisation to utilise the momentum, learning, support and infrastructure built up within the project to date in order to develop useful insights on aspect of digital audience engagement that were specifically relevant to them. These individual research experiments would also become exercises in learning to learn, identifying the opportunities and challenges in adopting such an approach. It would also ultimately inform the development of a future best practice framework and help Culture24 support similar future investigations within cultural organisations.

Therefore between March and June 2013, we asked participating organisations to come up with their own action research experiment focussing on understanding existing behaviours and/or trying to change these behaviours. Participants were able to report back to the group on these tasks at the final project workshop.

Culture24 provided an initial loose framework for structuring the research approach and subsequent reporting back, which organisations were free to use as appropriate. This was:

- Summary of your research question (including how it relates to your organisation's strategic mission)
- What you did
- What you learnt
- What next? (including how this will impact your organisation, how you will take it forward and how you will measure next steps).



10.2 Example research case studies

The following represent selected examples of individual organisational research experiments:

National Galleries of Scotland

Analysing existing mobile/tablet audience behaviour trends

Our research question(s)

We want to inform the direction our mobile web project takes and thus had the following questions:

1. What can Google Analytics tell us about how (sources), from where (geographically) and why (motivation or by inference of intent) visitors are coming to nationalgalleries.org using mobile devices?

2. What they are doing around the site once they are in?

3. What trends of mobile device form factors and capabilities (e.g. smartphones vs. tablets)?

What we did

We created a dashboard and a set of mobile reports in Google Analytics to interrogate our research questions.

What we learned

As a result of this research we have a better understanding now of the kinds of content mobile visitors are coming to and some of the differences in behaviours around mobile visitors and trends, but answers also tend to throw up several more questions. Key findings include:

- Tablet users are more likely to look at the online collection than mobile phone users. Last year, there was twice as much tablet traffic to the Collection section as there was mobile phone traffic (nearly 100,000 views vs. nearly 50,000).
- The Collection section is generally the top section for traffic on tablets, sometimes falling just behind What's On, but always ahead of Visit.
- Tablet users are also three times as likely as mobile phone users to visit the Online Shop. This has shot up from last year (2011-12) when it was about equal on both types of mobile device.
- As tablet traffic is speeding past mobile phone traffic, this makes a good case for improving the offer in our Online Collection section, as well as sprucing up the Online Shop and optimising for mobile devices.
- Mobile phone users are most likely to be looking at Visit and What's On, almost equally as of 2012-2013. The Collection used to be just as popular as Visit (both right behind What's On), but this has changed and the Collection has fallen further behind. We need to do more digging on this.

- As far as traffic sources, after Google searches and direct traffic, which are always top on everything, we get more referrals from Facebook and Twitter on mobile phones, and Artcyclopedia has dropped out of the top ten sources for mobile phone traffic altogether in 2012-13.
- On tablets, Artcyclopedia, Edinburgh.org, and Wikipedia provide the most traffic, all ahead of Twitter and Facebook. And Twitter DOES come ahead of Facebook here, though not on mobile phones.
- Tablet users stay on the site twice as long as non-tablet mobile users, and look at nearly twice as many pages. The bounce rate is also slightly lower. The proportion of new visitors vs. returning visitors is basically the same for both types of traffic.
- Tablet traffic has gone up nearly 6% year on year, while mobile phone traffic is at about 3%.

What next?

- Look into building surveys/segments into mobile analytics to get some visitor intention into the numbers
- Use in-person surveys to round out and interrogate the analytics data
- Cross reference in-gallery (i.e. NGS public Wi-Fi) visits from mobile devices to identify differences in behaviour between general mobile traffic and in-gallery mobile traffic
- Break down further differences between tablet and non-tablet mobile traffic to identify what approaches should be taken to the nature and presentation of content based on form factor
- Compare all this against desktop visits to determine what (if any) trends or convergences are developing as browsing patterns change from desktop-dominated to multi-device, multi-stage browsing patterns

Watershed

Editorial v information driven content experiment

Background

In the comparative results for the Culture24 site motivation questionnaire, Watershed had pretty well the lowest number of pages per visit figure of all the organisations. With pages per visit being a key indicator of engagement, this seemed like a metric worth investigating further.

Focusing on the 'What's On' content of Watershed's website, a reason for this could be that the website is successfully matching a visitor's motivation of finding out what films are on at Watershed this week. The website confirms whether we do or don't have screenings of a film visitors have in mind and then they leave the site with a broadly low level of engagement with the whole Watershed online offer.

One area we know that there are problems with is that, due to technical reasons (which we are working on), there are low profile, randomly served internal adverts on each film page to find out about other film screenings and activities at Watershed. Because of the position on the page of these internal adverts and the advert's often unrelated content, this hampers horizontal browsing of the site to find related content, or content that we are seeking to connect together.

Our research question(s)

Can the site generate more horizontal browsing to related 'What's On' film pages using specifically chosen, better positioned related content adverts? And what is the best content for these related content adverts?

Would simple information connectors i.e. "also showing" or editorialised connectors i.e. "Watershed recommends" be more effective?

What we did

We chose to run the test on the film *The Place Beyond the Pines*, starring Ryan Gosling, as we knew that film would have a good national marketing campaign behind it. This is a film therefore that comparatively we didn't spend too much time marketing – we just made sure that the information that it is on at Watershed was available on our website.

Additionally we chose a film in Watershed's cinema programme, Simon Killer, that was showing at the same time as The Place Beyond the Pines. Simon Killer needed promoting, as it didn't have much of a national marketing campaign behind it.



We hacked a one week only solution into the appropriate content management system template that allowed us to reposition the placement of the related content adverts, and to create two versions of it so that we could split test whether an informational related content connector or a editorially focussed connector has an impact on whether people followed the link to another film.

This test ran for one week only – the first week of *The Place Beyond the Pines* initial two week run. The second week reverted to our current film page format, potentially giving an additional comparison point.

We then ran a Google Content Experiment through Google Analytics that offered up two page variants of *The Place Beyond the Pines* film page – one with the information based related film advert and one with the editorial based related film advert.

What we learned

This was a small experiment in terms of the volume of data gathered, so caution should be exercised as to the robustness of any conclusions. However:

- The editorial version of the film advert created twice as many click-throughs as the information only version.
- Repositioning the film advert measured a 20% increase in content visits to film pages for the information only version, compared to the existing page template.
- Repositioning the content advert measured a 43% increase in content visits to film pages from the editorial version, compared to the existing page template.

What next

To repeat this test for a 2 week period to generate a greater dataset, and to see a Google Content Experiment in action again.





Existing

Test Original

Test Version 1

Culture24

Bristol Museums, Galleries and Archives²²

Culture24,

Analysing content engagement behaviour of email newsletter subscribers

Our research question(s)

Look at which content subscribers to our M Shed email newsletter respond to /engage with the most, and Increase engagement on M Shed web pages that come via referrals from our monthly email newsletter.

What we did

We measured this by:

- Tracking the open and click-through rates on our email newsletters, looking at imagery compared with text- based content in particular, as well as what the most popular content is. We used campaign tracking and custom URLs for this, as well as reports from MailChimp.
- Setting up custom segments on Google Analytics to track pages per visit, average visit duration and bounce rate for visitors who came to the website via our e-news. We also used this to look at visitor flow and to compare to previous e-news and the website average.

What we learnt

Text links v imagery links

It's interesting to note that the trend on our social media platforms for engagement with content including imagery (highlighted as part of the project work on social media behaviours) doesn't necessarily filter through to our e-news. We identified that people were more likely to click on a link in text than they were to click on an image, with links in text that 'prompt' people, i.e. 'click here for more info' getting the highest click through rate.

Our most popular link was actually towards the bottom of the newsletter (which had 10% of the total number of clicks), and again was a prompt for people to click on.

Artist Gavin Turk will be revealing his own quirky interpretation of a magic flying carpet experience for Museums at Night at Bristol Museum and Art Gallery on 16



May. Read more about Museums at Night at Bristol Museum and Art Gallery »

In future newsletters we could bring this type of content (the 'news' items) to the top to see if this makes a difference to clicks.

Website activity (via referrals)

The pages per visit actually decreased with April's e-news, although still within our target of 2-3 pages per visit. The average visit duration also decreased. The bounce rate has gone down slightly, but still isn't quite at our under 50% target.

I'll monitor this on future newsletters, but this may be due to the fact that the old format newsletters were all text based – you had to spend more time on the website in order to gain information, whereas with the new newsletters people can get more information in one place, and might not need to spend as much time on the website.

Benchmarking

I took some of the stats from MailChimp's benchmarking²³ research that I thought might be good to compare our stats with. Comparing with these our open rates seem about average, if not slightly less than industry benchmarks. However, looking at other industries, an average of around 40% for an open rate I think is pretty respectable. I'm also really happy with our click rate – about 10% of people click on a link in our e-news, compared to around 3.5% for the other industry averages. Our unsubscribe rate is slightly higher than others, but nothing that's concerning me at the moment.

What next

Looking at the stats for our newsletters will help when looking at content in future: what to feature, what to include imagery for and what to link to. As an organisation, we're in the process of looking at our digital offer so don't at the moment have organisational targets to measure against, but this will help us when setting these out in terms of how people engage with us on this particular platform compared to others.

22 M Shed is one of 'Bristol Museums, Galleries and Archives' museums. The M Shed micro website was analysed as part the project

23 http://mailchimp.com/resources/research/email-marketing-benchmarks-by-industry/

Polka Theatre

Explore existing online behaviours of potential donors

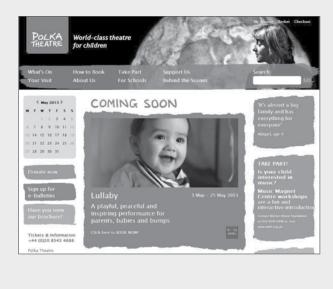
Our research question

As a key organisational aim of ours is to increase awareness of Polka's charitable status, we would like to research, monitor and improve traffic to the 'support us' page of the website by 50%.

What we did

We added a new 'donate now' button in a more prominent location of our home page on the left hand column that links through to the 'support us' page.

We then used Google Analytics to monitor the traffic to the page, see what other pages potential donors are visiting, and used goal flow to track journeys through the site that include the 'support us' page.



What we learned

We identified that very small portions of our audience are finding the support us page. Also that people who come to this page are interested in us as individuals, clicking onto the staff page to find out more about who we are, clicking on 'about us' to find out more information about the organisation. It is very valuable to Polka to know this as we can ensure that our copy is up to scratch on those pages and that we are making it as easy as possible for people to navigate back and hopefully donate.

What next

A good suggestion made at one of the project workshops was to develop a better relationship with these people further by having a 'sign up to the newsletter' function on the donate now page, so people can begin to engage with us further.

I would also like to develop better content on this page to increase the dwell time. I think a video with the Development Director speaking and footage of our work with young people will be instrumental in getting the message across and getting higher dwell times that will hopefully translate into donations. There has been some rough talk at Polka about developing this video in the future so as and when it comes onto the site I can monitor that period in comparison to this.

As we go forward, it could be useful to add more calls to action into the Polka email newsletters. We can monitor who clicked on any 'donate now' links in our emails, and use the Google Analytics goal flow to see if that has any impact on traffic coming to the page. I will also use Google Analytics to monitor if subscribers to the newsletter, who in theory should be more engaged with us already, are likely to spend a higher dwell time on the support us page if they come to it through a link in one of our emails.

A brief summary of other organisational research experiments:

Organisation	Research summary	
Wales Millennium Centre	"We want to understand how mobile/tablet users engage with their website and whether they experience the same level of customer service as a desktop user. This relates to our mission to provide the same (or better) level of customer service online, as we do offline."	
National Museums Scotland	"We wanted to test click-through rates on two different versions of the same page, analysing whether different treatment of a call to action was more or less effective. This is on the back of some usability work we've undertaken where issues with clutter and confusing calls to action have been highlighted on our website. This is the starting point for a full site redesign and we're starting to work with new templates so we can make adjustments before implementing across the board."	

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Organisation	Research summary
Amgueddfa Cymru - National Museum Wales	"Acquire a more in depth analysis of the 'Visiting' sections of our website both in terms of visitor sources and subsequent visitor flow.
	We looked for evidence of clarity (or confusion) on website navigability."
Tate	"How a new feature that allows users to explore related content of the page they are visiting can encourage them to look at more pages on a visit to the website and improve their online experience."
Warwick Arts Centre	"To evaluate the efficacy of links to future events in film pages: comparing the right hand default 'coming soon' links that appear by default to the 'upcoming events' links that can be added manually by creating relationships between events."
V&A	"Look more deeply at what the motivation survey information can tell us about our Visit Us section, based upon the differences between people who say they are planning a visit and those who are not within those results."
Science Museum	"What are the most effective ways to increase the number of external links coming into our site?
	We have seen a huge amount of success over the years when certain photos are picked up by external sites and blogs on Tumblr, Reddit and Stumbleupon yet we have done very little to cultivate this activity.
	We will look at images that are particularly popular and build content around these, ensuring that the content is also contextual and can feed into popular news and events when possible."
The Photographers' Gallery	"In preparation for launching thephootgraphersgallery.org.uk as a responsive site we wanted to dig deeper into Google Analytics to measure page views, dwell times and visitor flow to see what the metrics revealed about user experience, navigation and the existing structure of the website.
	We also wanted to establish if there were clusters or patterns of activity on key social media channels."
Wellcome Collection	"Compare the depth of engagement around programme-related rich content to the depth of engagement around non-programme-related rich content.
	Our hunch is that for many reasons programme-related content results in better engagement; our goal is to improve the depth of engagement around non- programme-related content using what we learn about both from the research.
	We would like to understand, for e.g. whether engagement with programme- related rich content is strongly linked to intention to visit."
Own Art	"Increase the goal completion rate for sections of the website we believe to be most relevant to our 'First Time Buyer' audience."
REcreative	"As we very recently rolled out some major changes to REcreative we'd like to use this period to analyse any changes in behaviour within our new resources pages and search function."
Brighton Museum and Art Gallery	"As we were unable to participate in the group online survey exercise, we would now like to run a short survey based on the motivational questions used in the group exercise, and tie in with questions relating to familiarity with the museum service, and satisfaction with the site."
Shakespeare's Globe	"To experiment with ways to improve online visits around seeking information for professional reasons and opening up our online resources to visitors."

10.3 Conducting research experiments - what we recommend

If you have a hunch, try and find a way to test it out.

Hunches and intuition can help drive change by challenging status quo, yet they only have so much purchase when trying to build a case to deliver change. Generating meaningful data that can back up such hunches makes them much more valuable.

Project participant: "The action research task was really informative as it enabled me to test a hunch and produce some data as a result - which did seem to support my hunch!"

Incorporate mini online research experiments and testing into your ongoing digital activities

Conducting experiments can be powerful as they can give cultural organisations quick insights into their current direction of travel regarding digital engagement. They should not be regarded as one-off actions but part of a broader knowledge building strategy. Small, continuous incremental changes should be the goal if resources permit.

Project participant: "It should be much more commonplace to do this sort of testing, and embedding it just a thing we do rather than in exceptional circumstances – it's easy to set up and results can be conclusive."

Don't try and research everything in one go - small findings can be hugely insightful

Some organisations within the group arguably attempted to cram too much into their action research process, making it hard to get off the ground quickly and running a risk of losing momentum. Does the organisational noise overhead make it so hard for some to try an experiment that when presented with an opportunity there is a tendency to try and do too much?

Validate your results where possible against available benchmarks

In order to understand the impact of experimental results it is important to provide context for them. Benchmarking against previous internal results or against equivalent competitors is a useful way to do this. This was illustrated in the approach taken by Bristol Museums, Galleries and Archives when validating their newsletter engagement results with MailChimp's benchmarking research.

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Don't worry if your experiment fails, this is still a positive outcome

Generating meaningful digital change can often take time with the likelihood of many failures along the way. Organisations need to be honest about this and pursuing research experiments allows them to fail faster and therefore learn faster.

Make sure your existing technology supplier relationship is fit for purpose to support an experimental approach

Undertaking these experiments allowed organisations to test relationships, with a few struggling to implement the quick technology changes necessary to allow them to pursue their research questions fully. Yet even in these cases there were valuable outcomes, as they became better informed of the type of supplier relationship issues that needed to be resolved.

Realise that undertaking research experiments provides the additional benefit of 'learning to learn'

Fundamentally these experiments became an exercise for project participants in 'learning to learn', namely testing the ability to ask questions, exploring the tools and methodologies for investigation and making data-driven decisions.





11. Impact of project on organisations

Victoria and Albert Museum

"Participation in this project has had a number of benefits that have been directly applicable to V&A Digital Media service-delivery. The three most significant were:

- Utilising an applicable methodology for linking data about user's stated intention with their actual behaviour,
- Robust benchmarking of statistical data across the live services of multiple cultural organisations and
- Increased professional and organisational knowledge through action-learning supported and reinforced through group participation.

Raw count-stats are notoriously ambiguous and open to misinterpretation. During the project, we have been able to gain added understanding of behaviour data relating to specific user-motivation. This has enhanced our understanding of how users' activity relates to their intent. As an example of the productive use of this research to improve services, we have used analysis of the navigational behaviour of people who stated they were planning a visit, to inform our current re-development of visitor information pages.

As well as providing insightful and useable local V&A data, the collaborative approach has allowed us access to data from other organisations for comparison. This has been made more insightful by hearing on-the-ground interpretation of what this data means locally from project partners in a variety of organisational contexts. This was extremely useful as it allowed us to better understand the subtle and complex contextual factors that affect both behaviour and the nature of the data that attempts to represent it.

A very useful project, delivering benefits for museum audiences and professional development for the museum staff who provide and develop museum digital services for those audiences."

Andrew Lewis Acting Head of Digital Media



National Museums Scotland

"Having been involved in the project since the early days, I'd describe its impact on National Museums Scotland as being subtle yet profound. There was never going to be a starry-eyed moment where everything fell neatly into place – instead it's been about leveraging a longer term shift in the way we consider digital's usage and effectiveness.

For big organisations (or maybe all organisations) change can be difficult. Difficult because it means adapting to new ways of thinking, of behaving, of doing things, and because it doesn't happen overnight. Change has been the driver of the project since it began; an open acknowledgement from the outset that the way we measure impact online wasn't working and a commitment to come together and try to alter the narrative around what digital could, and couldn't, do.

Since then Let's Get Real has helped shape our new digital strategy – the no-nonsense rhetoric ('be clear in what you are trying to do online and who it is for') being both an effective rallying cry and useful point of reflection when projects lose their focus. It's helped us provide a structure in planning the future of our organisational website, take a more enlightened approach to testing and learning, and start to ask probing questions about the value we get from social media."

Hugh Wallace Head of Digital Media



Polka Theatre

"Let's Get Real has been a learning and development opportunity for Polka Theatre. As an organisation we now have a greater understanding of our online audience and their motivations. With support from Culture24 we have been able to implement goal flow objectives in Google Analytics that allow us to see how our potential online donors behave and therefore use this information to improve the message we send about our charitable status. The project-based 'homework tasks' have facilitated a better understanding of and improved the ability to implement Google Analytics tools in house.

As well as an understanding of our social media growth and engagement in comparison to other organisations, Let's Get Real has been an invaluable opportunity to share ideas and expertise and gain inspiration from other organisations across the arts and culture sector."

Dawn James Press and Marketing Officer



Watershed

"Until fairly recently web analytics generated not much more than an annual headline stats submission to funders; and there was a general lack of clarity of how an analytics package could provide any meaningful understanding of our online audiences. This project has provided real insight, knowledge sharing and practical experience of delving deep into the analytical data that our websites generate, removing a sole reliance on best hunches and, albeit very valuable, online publishing experience.

With a better understanding of using web analytics we now have a new tool that we feel confident deploying whilst developing our online presence. For example, over the last year we have been exploring the notion of an editorial voice and approach to deepen the cultural capital of our activities. Web analytics have enabled us to actively test the difference this editorial voice can make to our audiences online engagement by producing real data on which to base our decisions.

During this period we have also made the transition from being a print-led organisation to being genuinely digital first in our communications mix and our greater understanding and use of web analytics gave us the confidence and the knowledge to believe that this was the right move to make. Further research and evaluation will help us determine the success of this and the impact it has had on our audience's engagement. It won't happen overnight, but I believe that gradually we will be looking more and more to web analytics to help us understand what our audiences want and value from our online offer."

David Redfern Online Publishing Manager



Danny Birchall

Web Editor

"For me, the value of the Let's Get Real project has been in learning from the best practice among our peers in other organisations. Inspired by Tate's example of reporting digital performance using a composite dashboard rather than a single 'visits' figure, we've started using a dashboard with the support of senior Wellcome Collection stakeholders, iterating its development in

Wellcome Collection

response to feedback each month.

Other parts of the Wellcome Trust are starting to adopt the dashboard format, enabling us to compare and contrast performance across the organisation, asking questions about relative levels of impact across our activities, and focusing on how we deliver to professional and public audiences. In particular, reporting mobile visits against key segments such as 'Visit Us' section of the site and London-based traffic has put responsive design clearly on the agenda for us as a customer service issue. Beyond changing the way we do things, taking part in

the workshops has also built relationships with other organisations. We've begun conversations with a nearby gallery about reciprocal staff visits, reinforcing the internal message by showing how other organisations are tackling the same problems as us."



Appendix 1: Social media detailed investigations

This appendix represents the detailed investigations of social media behaviours by Elena Villaespesa, in collaboration with Culture24 and the project group, and has been written by Elena. These investigations form part of Elena's PhD studies at the School of Museum Studies, University of Leicester. The key findings are summarised in Chapter 9, but the substantive explorations are detailed here.

Social media platforms can be used in many different ways depending on the organisation, these are managed in different departments which work with different goals and targets. It is an evaluation principle that performance measures need to be defined based on strategic objectives. Therefore the first step before looking at any data needs to be a clear definition of what the organisation is trying to achieve on social media and align these objectives with the organisation's mission. In view of the fact that each organisation's strategy is unique, each one should set up its own evaluation framework.



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A1.1 Cultural organisations on social media

A1.1.1 Social media strategic review

Although all the organisations have a profile on social media, the maturity of their presence on these channels varied across the group. Most of the organisations had a social media strategy, policy or working plan; however, for a few of them, the definition of objectives was still a work in progress. The objectives differed across the group, mainly depending on which department the strategy stems from. While in some cases, the strategy came from the digital media, web or marketing departments, interestingly enough, it could also be embedded in broader museum actions like public engagement. A question arises about how social media is used, existing a tension between being a platform aimed for marketing activity or a social space for engaging with users. There were discrepancies on which departments should be in charge of the social media activity, and some even called into question how this was organised within their own institutions.

The objectives recorded can be summarised and grouped into the following perspectives:

- Community
- Develop a local/national/international community
- o Create new audiences
- Brand
- o Increase brand awareness
- Brand building, raise profile visibility and position of the organisation
- o Increase advocacy from the users

- Marketing and communications
- o Increase awareness and knowledge of the collection
- o Promote exhibition and events programme
- Drive ticket sales and generate revenue from ecommerce activities
- Convert these online users into physical visitors and increase footfall to the venue
- Publicise news and press items
- Use these channels as a crisis communication tool
- Interaction
- o Encourage dialogue and conversations
- Create participatory activities to engage with the collection and venue programme
- Support learning activities
- Content
- o Drive traffic to the website and other online platforms
- o Distribute blog posts, videos, images, articles
- Visitor services
- Get feedback from what visitors say about the organisation
- Provide visiting information and respond to enquiries

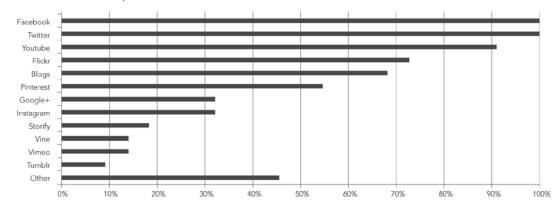
A1.1.2 Platforms

A list of the social media accounts was assembled at the beginning of the project and given that all participating organisations have a profile on Facebook and Twitter, the analysis was narrowed down to these two platforms. Besides, most of the organisations also had more than one account on Twitter and Facebook, in some cases, because they have more than one physical venue and in others, because these were accounts created for different streams of activity and targeting specific audience segments such as film, members, teachers, press office or shop. Of the other social media platforms, YouTube and Flickr are the most commonly used. A lower

Figure 11: Social media platforms

percentage of the organisations had opened a profile in the newest platforms like Google+ or Pinterest. Other platforms used by these organisation included Foursquare, Soundcloud, Spotify, Delicious and Audioboo.

Experimenting and opening a profile in a social media site needs to have its own objectives and target audiences as the platforms are very different and it is important to define how its use will align with the organisation's mission and choose the right ones instead of creating profiles in all the available platforms.



A1.1.3 Investment

The number of people and time invested in managing these platforms varies per organisation, something that in most cases is tied to their size. Social media management is increasingly becoming a shared task among people from different departments and therefore, estimating the staff resources investment is complicated. While in some of the participating organisations there was a dedicated person or team managing the accounts, in others, this task was just one of many duties assigned to certain members of staff. The most common scenario is to have just a small team doing the updates and monitoring the different channels, however, the number of content contributors across the different departments of these organisations is steadily increasing. It was also noted that this varies depending on live tweeting during an event or number of visitor enquiries sent via social media. Furthermore, as some organisations have more than one account on those platforms, there are specific departments in charge of managing these different accounts.

Figure 12: Number of staff working on social media

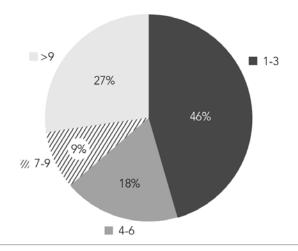
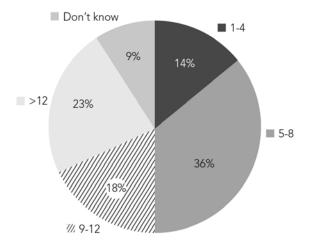


Figure 13: Number of hours per week spent working on social media



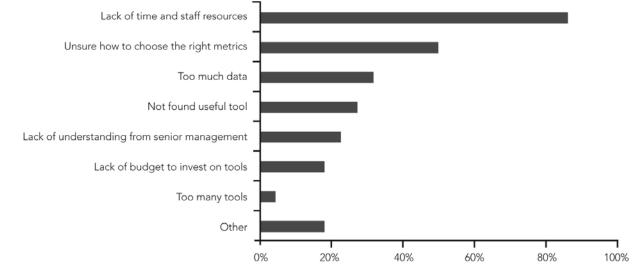
A1.1.4 Evaluation challenges

As compared to a couple of years ago, the way of reporting social media metrics has currently acquired a more comprehensive approach. Today, apart from tracking the number of followers, the number of comments, mentions and other interactions is also taken into account. Approximately half of the organisations put this into practice by offering free tools and the other half by using a mixed of free and paid tools. Most organisations are evaluating and reporting social media results on a regular basis, some in a more formal reporting structure than others that ranges from annual KPIs reports and monthly dashboards circulated to all staff, to emails with main highlights for the team.

However, there are still some big challenges in this area. Eightysix percent of the participating organisations said that the main challenge they face is the lack of time and staff resources available to measure the impact of their social media activities. The second challenge they mentioned had to do with the metrics, as despite the amount of data available through the analytics tools, choosing the most appropriate ones and making sense of them represents a big obstacle in the evaluation. Another challenge has to do with the tools and with the current lack of standards. As no single tool has the ability of aggregating data from all social media sources, this task can become very time consuming. Finally, it is worth noting that, in certain cases, some senior managers do not have enough information at their disposal and they lack expertise in the field.

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A1.2 Social media metrics review

A1.2.1 Methodology

This research about social media behaviours was carried out with a dual purpose. On the one side, a benchmarking exercise of social media metrics that will allow us to identify trends and compare main metrics across the cultural organisations in the project. On the other, a practical exercise done in conjunction with the organisations in which they analysed their own data, followed by a further discussion that took place during one of the meetings held by the group, facilitating thus the exchange of findings and making it possible to identify the most useful metrics.

During the project an array of different social media metrics was collected taking a mixed-method approach and including both quantitative and qualitative data. The time frame of the data varies per platform, depending on the data collection tool limitations and on the organisations' analytics settings. The following table summarises the data collected and analysed, as well as the tools used for this purpose.

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Platform	Tool	Data
Facebook	Facebook Insights	Likes (fans) Reach Impressions Type of post (links, status update, video, share, question) Likes Shares Comments Clicks (photo, links, video) Top 10 posts with higher interaction rate
	NVIVO (NCapture browser extension)	Posts Type of post (objective, type of activity, content) Type of comment Length of comments Sentiment Message direction
Twitter	Museum Analytics	Followers
	NVIVO (NCapture browser extension)	Number of tweets Retweets Top 10 tweets with higher virality rate
Website	Google Analytics (Social media dashboard)	Visits from social media sites (Facebook, Twitter, Pinterest, Tumblr, YouTube, TripAdvisor, Reddit, StumbleUpon) and Wikipedia Bounce rate Pages per visit Average time on site Percentage of new vs. returning visitors Mobile visits Top social media referrals Revenue by social media site Most shared pages Clicks on social media buttons

There were some limitations in this benchmarking exercise and, as the group featured a great diversity of organisations in terms of arts activity, strategies and size, the results were more useful when analysed by groups of similar organisations. Therefore, the findings presented here are not focusing so much on the benchmarking results, but more on the learning outcomes that took place during the project as a result of applying different metrics to measure the impact of social media. Based on the strategic objectives of the organisations, the type of activity done on social media and taking into account the lessons learned in the application of the different metrics a Social Media Evaluation Framework is proposed in this report. Depending on the strategic objectives, the framework needs to be designed choosing the most appropriate metrics. For each metric, the formula and reporting frequency needs to be defined and finally, a tool to collect, analyse and report this data needs to be selected. (for more information see page 36 in 'understanding social media behaviours recommendations')

A1.2.2 Definition of standard metrics

This research included the analysis of a series of social media metrics regarding community size, reach, and interaction, as well as website visits coming from social referrals. Although the benchmarking exercise was carried out through Facebook and Twitter, as these two platforms were used by all the participating organisations, it is important to define a series of metrics that could be applied to any given social platform. Nevertheless, as we could see in the practise stage, these metrics definitions vary per platform and depend greatly on the methods and tools used to collect and analyse the data.

For the purpose of the research the definitions of the social media metrics are as follows:

- Online community size: number of users that follow the organisation on a social media platform (fans, subscribers, likes, followers).
- Reach: number of users that have seen the content posted. There are normally three ways of reaching users: organic (those who follow the organisation), viral (users that see the content because it was shared by followers) and paid (promoted campaigns). In consequence, depending on the impact of number of shares and the influence of the people sharing content, campaigns and other variables such the amount of inactive or spam users, the actual reach of the content will differ from the number of people that follow the organisation.
- Interaction: count of actions such as likes, comments, shares, clicks to view images or videos, and favourites on the post published. The interaction rate is measured in different ways by the different social media analytics tools. While most calculations normally divide by the number of followers, this number is not equal to the people that have actually seen the content. Therefore, the following formula is proposed, calculating the percentage of actual users that see the content and also interact with it:

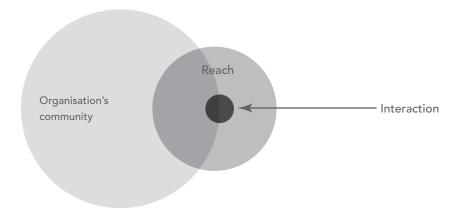
Number of interactions (unique)

Interaction Rate = -

Reached users (unique)

The diagram here represents these three metrics. The size of the circles will vary depending on the community size, type of reach and finally, degree of interaction with the content posted.

However, as we will see in the next sections, it is not always possible to put the theory into practice and it has to be noted that the metrics that are currently available on social media sites have some limitations. While the ideal scenario would be to apply the formula above, for this exercise it will be adjusted to the interaction analysis.



A1.3 Social media community

The number of users in your online community, Twitter followers and Facebook likes in this particular case, is a metric that all the organisations measure and report about internally and, in some cases, externally to their funders and sponsors. It is useful to a point to know the size of the community but this number tells us little about the conversations and the actual level of engagement on social media so the analysis needs to go beyond this count of users.



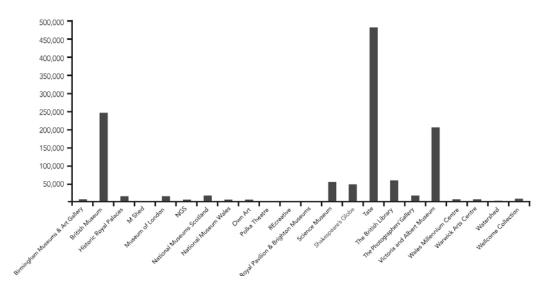
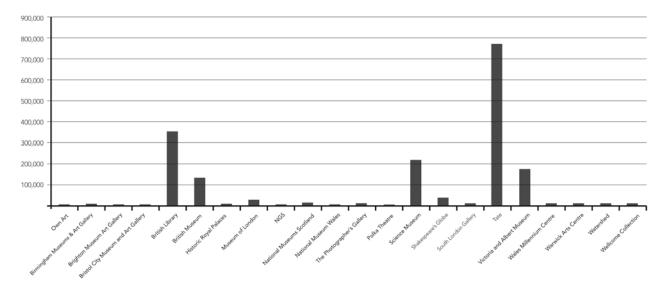


Figure 16: Number of Twitter followers (December 2012)





A1.4 Social media interaction

In order to drill down and understand the level of engagement we can measure, for instance, clicks on a link to a blog post, shares of a photo or a comment on the information posted about a particular exhibition. For the Facebook analysis the following interaction rate formula was applied where "people talking about this" is defined on Facebook as the number of unique people who created a story by interacting with your page post (unique users). Stories include: sharing, liking or commenting on your post, answering a question, responding to an event and claiming an offer. The analysis included the interaction rate of 9,725 posts from the organisations in the group in 2012

People talking about this

Facebook Interaction =

Reached users

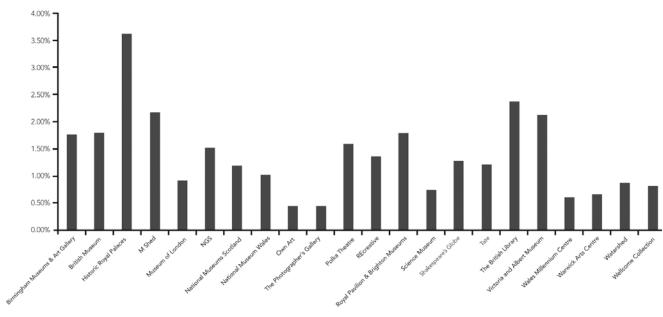
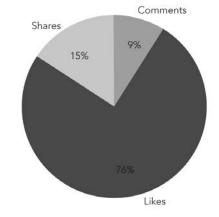


Figure 17: Interaction rate of organisation's Facebook posts in 2012

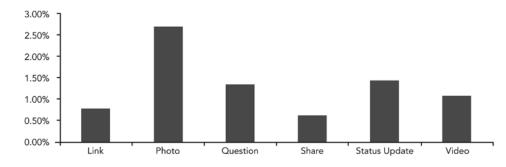
The breakdown of the type of interactions is provided on Facebook Insights. The interaction distribution shows that 76% of these actions are likes, which is the easiest interaction, while shares and comments account for 15% and 9% respectively. Images on posts and photo albums are popular on Facebook and bring a higher interaction rate than other type of posts.

Figure 18: Distribution of the type of interaction



Images on posts and photo albums are popular on Facebook and bring a higher interaction rate than other type of posts.





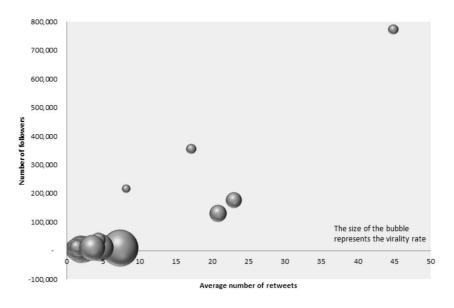
Ideally, the formula for Twitter would count all the possible actions that imply an interaction with the tweet (retweets, replies, favourites, shares via email or embeds) divided by the number of users reached. However, this data is not easy to track and when this research was carried out, only the organisations that run promoted tweets campaigns had access to Twitter analytics. Therefore, for the benchmark of the twitter activity this research only looked at the virality of content using the following formula:

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Virality rate =
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Number of followers

The big limitation of Twitter is that it does not provide information on impressions or actual reached users. This has an impact on the results, as the number of followers includes inactive or spam users. The analysis included 8,135 tweets (excluding retweets) posted by the organisations from September to December 2012.





The interaction and virality rates were very positively received metrics by the group. This is a metric that can help to monitor and evaluate the most and least successful posts, allowing to dig deeper into the results and to understand what type of content drives higher engagement. The organisations were provided with the top 10 most shared tweets during this period. This allowed them to establish a context to the results and to identify the type of content users were more willing to share. Individual analysis of the most successful posts allowed us to identify the factors that influenced these results, such as call to actions, tone or use of hashtags.



"The top tweets are to do with Ada Lovelace and her birthday, a tweet on Christmas day about Sir Isaac Newton and also a reminder about the Gemidi meteor shower. This is positive to see because it is still our content and relevance to contemporary science that our audiences engage with." Science Museum retweets was arts-focussed, but not specifically related to Warwick Arts Centre. It may therefore be worth exploring more content that places Warwick Arts Centre in the conversational role - engaging with our audiences as peers with common interests rather than broadcasting marketing messages. Because Twitter generates a relatively low amount of traffic towards our website, such a paradigm shift is unlikely to negatively affect ticket sales and engagement, and could potentially help nurture the organisation's online voice and reputation to our long-term benefit." Warwick Arts Centre



Figure 21: Wordcloud of the hashtags used in the tweets (September - December 2012)



The organisations are utilising the features of the platform, for instance, with the use of hashtags. They use their own hashtags for different topics as exhibitions (e.g. #HollywoodCostume, #TurnerPrize) or series of tweets (e.g. BMAAdventCalendar, #ScotPortrait, #LunchtimeReading, #SpookyShakespeare), join initiatives such as #Askacurator or use generic hashtags such as #FF, #Halloween, #Movember.

In the final group discussion people showed an interest in measuring the impact of the use of hashtags to create conversations and to reach other users beyond their profiles feed activity, as hashtags are also promoted on the website and during the physical visit to the venue.

*Due to the high volume of comments the number analysed for the

following a coding scheme and using content analysis (see Figures

Facebook. The post coding scheme records the primary objective

of the post, as well as the type of activity created by the museum. Regarding comments, the categories were created after a first

examination of the data and modified as coding was done. Some

numbers and percentages, but others also provide the opportunity

to code the text by themes or sentiment in order to understand the user's perceptions and feelings in response to the post, expressed

of these categories enable to turn the posts and comments into

The posts and comments were coded in different categories

23,24). The categories were defined based on the social media

strategic objectives of the museums and the actual activity on

V&A and Tate include only one week.

with words or emotions.

Analysing the tweets and posts with higher interaction and also the ones creating peaks in traffic to the website was very valued by the group as it provided further insights on the most successful activities based on these metrics. A further analysis here tested how to link these metrics to the strategic objectives. This part of the research seeks to examine on the one hand, how museums are using social media by looking closer at the message, objectives and the type of activity and on the other, it links this activity to the degree of interaction, while examining user comments and analysing the type of responses generated, depth and sentiment. Due to the time intensity of this task, this research was carried out by tracking the Facebook activity of a sample of eight museums and galleries during one month (November 2012), featuring a total of 220 posts and 867 comments.

Fig 22: Facebook data analysed (November 2012)

Museum	Comment	Post
Birmingham Museum and Art Gallery	84	52
Museum of London	18	51
National Galleries of Scotland	43	29
National Museums Scotland	59	18
Tate*	531	20
The Photographers Gallery	3	10
Victoria and Albert Museum*	91	15
Wellcome Collection	38	25
Grand Total	867	220

Figure 23: Coding scheme for the Facebook posts

Objective

 Promote exhibition or event
 Collection object
 Promote museum products
 Engage with users
 Distribute content
 News
 Jobs
 Audience research

Type of activity

Conversation
Participatory activity
Context
Promotion

Content

	Photo/album
	FILOLO/ AIDUM
<u> </u>	Blog Audio
	Video
	Review, article

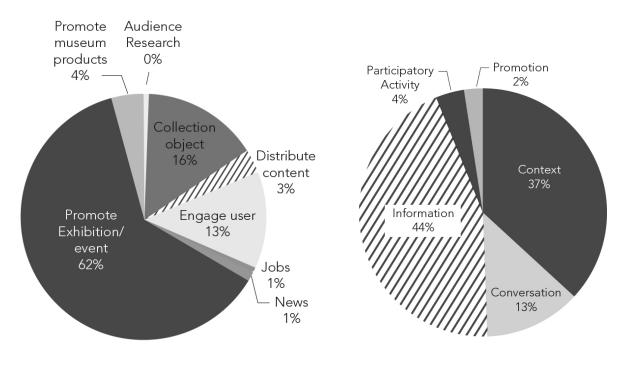
Туре	Sentiment	Length (n. words)	Message direction	
Information seeking Interaction with friends Opinion/ Emotion Informative Complaint Interaction with the museum	Positive Negative	0-5 6-10 11-15 16-20 21-25 26-30 >31	User to museum User to user User to user User to friend	

Figure 24: Coding scheme for the Facebook comments

Figure 25 shows the results of this analysis. It is apparent that social media is clearly used by museums as a marketing tool as 66% of the posts included promotion of exhibition, events or products such as shop items or memberships. Only 13% of the posts analysed are using it for solely engagement creating posts, such as behind the scenes or topical conversations not directly linked to the promotion of an exhibition or collection object on display. The results show a more or less mixed message approach depending on the museum. This data also provides interesting information on the ways of

promoting the museum programme, which takes advantage of the medium and is regularly done with a more informal and conversational voice. Actually, the analysis of the type of activity shows the importance of content, such as blogs, videos or articles to promote the programme, to provide further context to the collection objects and to serve as a way to engage with users.

Figure 25: Facebook posts categorised by strategic objective and type of activity



Strategic objective

Type of activity

The interaction rate of these posts was linked to the objective and type of activity. The results on figures 26 and 27 are quite revealing as they demonstrate that when the museum creates more engaging activities and link to content, the interaction rate is higher. It is worth noting how much higher the interaction of a post on Facebook

is when it has an image, as it is clearly shown on the posts about collection objects which, for the most part feature an image. From linking the interaction to specific posts and reading the comments we can see how the tone and type of content highly influences the level of interaction.



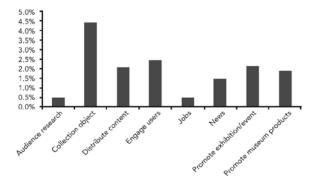
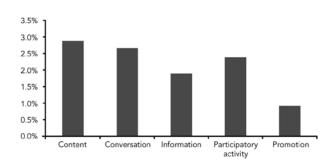


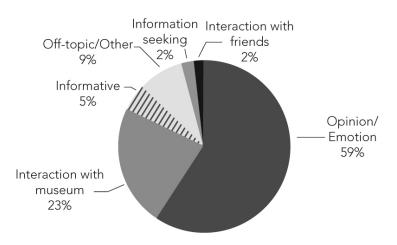
Figure 27: Interaction rate by type of activity



The results obtained from the analysis of the type of comments (as demonstrated in Figure 28) show that 59% of the users expressed their opinion or emotion about the content that was posted, for example about how they like an artwork, what their experience of visiting a particular exhibition was or their feelings while watching a video. Sentiment analysis can be applied to this type of opinionated comment to understand what people think about the organisation, the exhibition programme or the specific posted content. Regarding more conversational responses, 23% of the comments represent

direct interaction with the museum in most the cases in response to a question or debate posted by the museum. The analysis of the comments also highlights the importance of the museum's presence on social media to respond to users' questions about visiting hours, works on display or exhibition dates. Another usage of comments as a social space was identified as users were tagging their friends in their comment to share the museum content, recommending it to friends or proposing, for example, an exhibition visit plan.

Figure 28: Type of comments



A metric that can help to measure the depth of the engagement is the length of the comments. Figure 29 shows the distribution of the length of comments measured by the number of words. Approximately half of the comments analysed have less than five words and the average is nine, a figure regarded by the group as very light engagement.

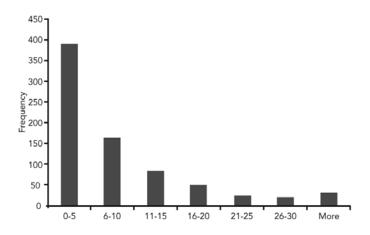


Figure 29: Length of comments in words (excluded comments from the museum)

This part of the research was an experiment carried out to test another data analysis method combining quantitative and qualitative metrics. Although the current study is based on a small sample of participants, the findings suggest that the type of post and content used on social media influences the level of engagement. This exercise was very positively valued by the group as it drills down into the type and degree of interaction compared to a mere count of numbers. The creation of a coding scheme that could work for eight museums proved some difficulties in defining standard categories. A coding scheme can be developed based on the specific museum objectives with the aim of measuring the impact of different types of activities. The main drawback is that this exercise is extremely time consuming as content and sentiment analysis is difficult to automate.

In conclusion, whereas the benchmark of data provides insights of trends, a more in-depth analysis of the results of a sample of posts will greatly increase the understanding of which are the most and least successful activities to accomplish the strategic objectives. Each organisation has a different set of objectives and even within the same organisation there are diverse types of messages and goals.

A1.5 Social media as a referrer to websites

Another way of interacting with social media is clicking on a link to the organisation's website and this is one of the objectives shared by many participating organisations. Thus, in this part of the analysis we aimed to explore the impact that social media has on the website in terms of volume of visits and to understand user behaviour on the website, when referred to from social media sources, compared to other traffic sources. A dashboard²⁴ was created on Google Analytics to analyse the traffic from social media. In 2012, traffic to the website from social media represented on average approximately 5% of the total. The only notable exception is REcreative where the high percentage is due to being a new project creating its brand and that is focussed on young people. As concluded in the previous project report, the volume of traffic from social media is quite low compared to organic search traffic.

24 https://www.google.com/analytics/web/template?uid=HKFxLRq1SkiFY4K-6xXDNA

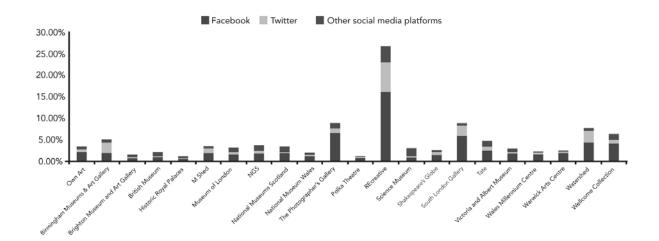
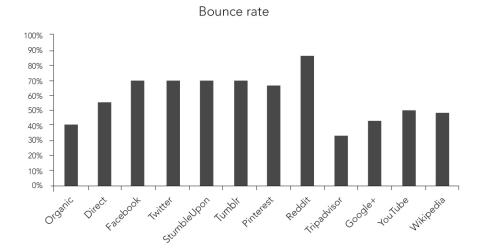
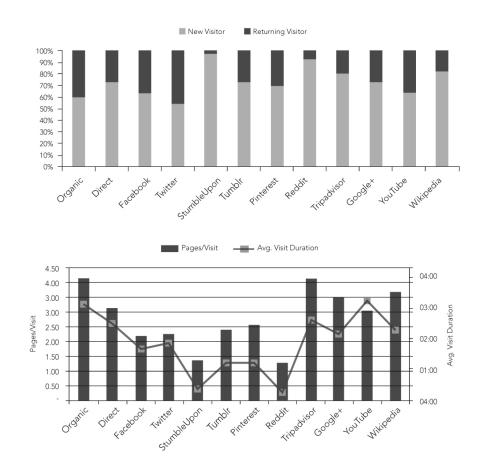


Figure 30: Percentage of traffic to the website from social media, Facebook, Twitter (2012)

Organisations were also able to analyse the daily traffic from Facebook and Twitter and to identify peaks of traffic, which brought very interesting findings about the most successful posts and tweets and also allowed to discover some interesting stories on how the content had been shared by users. While the number of visits from the most shared URL normally came from the organisations' own social media channels such as the exhibitions, big events and job ads, other content shared by users outside those sources also brought a significant volume of visits. For example, Warwick Arts Centre found out that some popular pages included student-run events and volunteers opportunities, where students acted as advocates sharing content on their own networks and generating a great amount of traffic. The Science Museum discovered that a link from StumbleUpon brought an enormous amount of traffic to an old game called Cracker and Tate detected that almost every week, one of the most watched videos on their website comes from an image that has gone viral on Pinterest.

Google Analytics reports also allowed us to get into more detail and to understand the online behaviour of the different traffic sources. The most striking result emerged from this data is that among the most commonly used platforms, Facebook and Twitter have a higher bounce rate and lower average time on site than other traffic sources. Users from social media arrive most of the times directly to the content and there is not a big exploration of the site following beyond this landing page. This raised a discussion within the group about whether or not some changes could be made in order to keep these users navigating on the website or, on the contrary, this was just the way users from these two platforms prefer to consume the content and therefore, right after seeing it, they would normally get back to their social media site to continue reading their feeds. Interestingly, the percentage of returning visits from Facebook and Twitter is higher than from other social media sites, so these are probably users that follow the organisation and engage regularly with the website.





For some organisations, one of the objectives is to drive up sales, for instance, for exhibition tickets or shop products. As not all the organisations had ecommerce activities or the analytics settings to track traffic across subdomains, this part of the analysis was based on the few responses given on this aspect. Social media was not a significant direct source for sales since it represented a small percentage compared to other sources. However, social media may be part of the conversion process. Recent publications from Google show that social media acts more as an assisting channel that creates awareness and builds intention in the customer journey. This can be analysed using the multichannel reports on Google Analytics. Nevertheless, there are some limitations on what can be measured, as some users may find the information on a particular exhibition on social media and then, decide to buy the ticket at the venue. It is more complicated to track visits to the venue resulting from the social media activity when there is no transaction involved, so its measurement needs to be complemented with some on-site research methods, such as surveys.

A1.6 References/Links

Google Analytics social media reports http://www.google.com/analytics/features/social.html

Tracking clicks on social media buttons https://developers.google.com/analytics/devguides/collection/gajs/ gaTrackingSocial

Facebook Insights: metrics definitions https://www.facebook.com/help/336893449723054/

Museum Analytics page for the project http://www.museum-analytics.org/tag/culture24 Google Analytics social media dashboard https://www.google.com/analytics/web/template?uid=HKFxLRq1SkiFY4K-6xXDNA

Google Analytics: Customer journey to online purchase http://www.google.com/think/tools/customer-journey-to-online-purchase.html

Google Analytics Multichannel Reports http://www.google.com/analytics/features/multichannel-funnels.html

List of social media tools http://weareculture24.org.uk/projects/action-research/



Appendix 2: Full list of project partners and URLs

Organisation	Lead Contact	Website
Amgueddfa Cymru – National Museum Wales	Dafydd James	www.museumwales.ac.uk
Birmingham Museums	Linda Spurdle	www.bmag.org.uk
Brighton Museum and Art Gallery	Kevin Bacon	www.brighton-hove-rpml.org.uk/
British Library	Adrian Arthur	www.bl.uk
British Museum	Matthew Cock	www.britishmuseum.org
Historic Royal Palaces	Tim Powell/Carol Wong	www.hrp.org.uk
Bristol Museums, Galleries and Archives	Hala Osman/Fay Curtis	www.mshed.org ²⁵
Museum of London	Rhiannon Looseley	www.museumoflondon.org.uk
National Galleries of Scotland	Gregory Stedman	www.nationalgalleries.org
National Museums Scotland	Hugh Wallace	www.nms.ac.uk
Own Art	Mary-Alice Stack	www.ownart.org.uk
The Photographers' Gallery	Jo Healy/Richard Thompson	www.thephotographersgallery.org.uk
Polka Theatre	Dawn James	www.polkatheatre.com
REcreative	Sarah Coffils	www.recreativeuk.com
Shakespeare's Globe	Jack Harris	http://www.shakespearesglobe.com
Science Museum	Gemma Bardsley	www.sciencemuseum.org.uk
Tate	John Stack / Elena Villaespesa	www.tate.org.uk
Victoria and Albert Museum	Andrew Lewis	www.vam.ac.uk
Wales Millennium Centre	James Hourihan	www.wmc.org.uk
Warwick Arts Centre	Katie Anderson/Will Thomas	www.warwickartscentre.co.uk
Watershed	David Redfern	www.watershed.co.uk
Wellcome Collection	Danny Birchall	www.wellcomecollection.org

25. M Shed is one of 'Bristol Museums, Galleries and Archives' museums. The M Shed micro website was analysed as part the project.



Credits

Report authors

Sejul Malde, Jane Finnis, Anra Kennedy, Mia Ridge, Elena Villaespesa and Seb Chan

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We are passionate about arts and culture and use our expertise, knowledge and digital infrastructure to help the sector improve the success and impact of its work online. We have been proactively kick-starting changes in how the sector evaluates and understands success online through our 'Let's Get Real' action research projects, published reports and conferences.

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