

McKinley, D. (2012). Practical management strategies for crowdsourcing in libraries, archives and museums. Retrieved from <http://www.digitalglam.org/crowdsourcing/crowdsourcing-strategies/>

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**Practical management strategies for crowdsourcing  
in libraries, archives and museums**

Report: October 2012

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## 1. Overview

Digital technologies are contributing to the rise of an increasingly participatory culture, in which lowered barriers to civic engagement and evidence that personal contributions matter are encouraging people to take a more active role (Howe, 2009; Jenkins, 2006; Shirky, 2010). This shift is reflected in the growing number of libraries, archives and museums (LAMs) using crowdsourcing as a way to create and enhance online collections and resources more cost-effectively, engage the wider community, and enable research. Crowdsourcing is “an umbrella term for a highly varied group of approaches” to outsourcing tasks traditionally performed by specific individuals to a group of people or community through an open call (Howe, 2009, p. 280). Since 2007, LAMs have been inviting online volunteers to assist with large-scale projects that require human cognition, such as tagging, identification, proofreading, transcription, text encoding, translation, and content creation (Terras, 2012, p. 175).

The efficiency and effectiveness of crowdsourcing in this context is subject to management decisions concerning task allocation, project objectives, volunteer recruitment, systems design, volunteer support, moderation, and evaluation. However, as no publication to date offers a comprehensive, LAM-focused, strategic framework for crowdsourcing, managers are required to mine literature and theory across a range of disciplines, including business, economics, marketing, information and library science, computer science and engineering, design, and digital humanities. With a view to recommending some practical management strategies for LAMs, this report reviews some of the literature and theory on crowdsourcing within the broad field of management, and considers how it relates to recent research on crowdsourcing in the context of LAMs. The recommendations put forward will provide managers with a basic foundation for planning crowdsourcing projects, and serve as the basis of future research.

## 2. Literature Review

### 2.1. A new business model

Leveraging off the Internet, and ever faster, cheaper, smarter and easier digital technologies, crowdsourcing is a new Web-based business model that has impacted significantly on the business world (Garrigos-Simon, Lapiedra-Alcamí, & Ribera, 2012; Howe, 2009, p. 78; Shirky, 2010, p. 48). As Gaule (2011, p. 60) explains, “smaller companies are now often better placed than their bigger rivals to pursue market niches, or even disrupt whole sectors”. The concept of crowdsourcing, as put forward by Jeff Howe (2006), was initially addressed in the management literature as a new trend that demanded ethical reflection. Early large-scale examples of crowdsourcing, such as Amazon Mechanical Turk, which enables companies to outsource labour to an unknown ‘crowd’ for less cost than traditional methods, and t-shirt company Threadless, which invited the general public to contribute and vote on designs, meant that this new approach was initially considered in light of disruption to organisational structures, and exploitation of the new labour force (Daft, 2008, p. 373; Williams, 2008, p. 235). Crowdsourcing has also been considered merely an extension of freelancing (Sollish & Semanik, 2011). Taking a wider view, Afuah (2009, pp. 107–108) identified some of the benefits of crowdsourcing for organisations, advocating that this approach will become increasingly central to game strategy.<sup>1</sup> By drawing on a wider pool of people, with different backgrounds, mental models,<sup>2</sup> and expertise, the organisation is likely to arrive at the solution in less time for less cost. Similarly, for LAMs, crowdsourcing can achieve goals that are otherwise too labour-intensive, better reflect the diversity of visitors, tap into expertise outside the institution, and engage visitors in new ways (Newman, 2012; Simon, 2010; Smith-Yoshimura, 2012, p. 4). Moreover, tasks can be along any value chain, which is to say crowdsourcing can also be used to innovate internal processes (Afuah, 2009, p. 107; Hopkins, 2011, p. 107). Indeed, Howe (2009, p. ix) believes that “crowdsourcing’s limits are determined by people’s passion and imagination, which is to say, there aren’t any limits at all”. In response to the flexibility of this new

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<sup>1</sup> “A new game strategy is a set of activities that creates and/or appropriates value in new ways [and puts] the firm in a position to profit from the value created. . . . It is often about rewriting the rules of the game, overturning existing ways of creating and appropriating value”. (Afuah, 2009, p. 4)

<sup>2</sup> “Beliefs, ideas, images, and verbal descriptions that we consciously or unconsciously form from our experiences and which (when formed) guide our thoughts and actions within narrow channels.” <http://www.businessdictionary.com/definition/mental-models.html#ixzz2Adbv17HG>

business model for both commercial and non-profit organisations, a more exhaustive definition has recently been put forward:

Crowdsourcing is a type of participative online activity in which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task. The undertaking of the task, of variable complexity and modularity, and in which the crowd should participate bringing their work, money, knowledge and/or experience, always entails mutual benefit. The user will receive the satisfaction of a given type of need, be it economic, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage that what the user has brought to the venture, whose form will depend on the type of activity undertaken. (Estellés-Arolas & González-Ladrón-de-Guevara, 2012, p. 197)

## **2.2. Crowdsourcing approaches**

Howe (2009, pp. 280–281) identifies four primary categories of crowdsourcing: collective intelligence, crowd creation, crowd voting, and crowdfunding. A survey of crowdsourcing systems by Yuen, King, & Leung (2011, p. 768) identified a fifth category: games, which produce useful metadata as a by-product. Taking its cue from citizen science, crowdsourcing research in the cultural heritage sector uses a different classification scheme for projects involving public participation: contributory, collaborative, co-creative, and hosted (Oomen & Aroyo, 2011, p. 139; Simon, 2010, p. 185). As LAMs have not yet embraced the potential of crowdfunding (online fundraising), this is rarely mentioned in the literature. Within this classification scheme there are various types of crowdsourcing initiatives, including text correction, transcription, contextualisation, complementing collections, classification, co-curation, translation, digitisation, and text encoding (Budzise-Weaver, Chen, & Mitchell, 2012; Newman, 2012; Oomen & Aroyo, 2011, p. 140; Terras, 2010) (See Appendix for examples). All of these initiatives benefit from what Howe (2009, p. 14) calls people's 'spare cycles', and Shirky (2010) interprets as 'cognitive surplus', which is the spare time not claimed by work or other obligations. By breaking down large tasks into small chunks or 'micro-tasks', even people with

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only a few minutes to spare can meaningfully contribute to a crowdsourcing project (Howe, 2009, p. 11).

### **2.3. Volunteerism**

Howe (2009, pp. xii, 15, 196) explains that successful crowdsourcing efforts share a deep commitment to the community. Involving consumers in the production process builds goodwill and brand loyalty, and any crowdsourcing initiative should be a meaningful exchange. While this commitment to community makes crowdsourcing a suitable model for public institutions, it is perhaps the ‘meaningful exchange’ that represents the clearest division between crowdsourcing as it is used by commercial companies and LAMs. Rather than being driven by competitive advantage, or incentivizing the crowd with financial remuneration or other forms of personal gain, crowdsourcing in the LAM sector is seen as the continuation of a long-standing tradition of volunteerism for the public good (Kanter & Fine, 2010; Owens, 2012). Common motivations for volunteers include the size of the challenge, the necessity for volunteer contribution, collaboration with prestigious institutions, contribution to research, education, mental stimulation, being part of a community, personal research interests, and enhancing a resource from which they will benefit (Holley, 2010; Simon, 2010, p. 195; Smith, 2011). As Oomen and Aroyo (2011, p. 139) point out, not only can these new forms of collections usage lead to a deeper level of involvement with the collections, but these initiatives will also be of growing importance from a managerial and public relations perspective, as funding of many heritage organizations is based on their societal impact. For LAMs, most crowdsourcing projects do not involve anonymous masses of people, and the majority of contributions are made by a core group of dedicated participants (Causer & Wallace, 2011; Chrons & Sundell, 2011, p. 4; Owens, 2012; Taranto, 2011). For this reason it is perhaps useful for LAM managers to think of this new business model as a way to reach more people that share a particular interest, and an opportunity to benefit from the knowledge and enthusiasm of “innovative, committed and networked amateurs working to professional standards”, known as ‘pro-ams’ (Leadbeater, 2004, p. 9; Shirky, 2010, p. 90).

## **2.4. Project management**

Despite the increasing number of crowdsourcing projects driven by LAMs, published research on best practice is limited. Howe (2009, pp. 278–288) provides some general ‘rules’, many of which are applicable to volunteer projects, and Simon (2010) offers advice on public participation that is applicable beyond the museum sector. Sherman (2011) provides the most accessible, comprehensive overview of crowdsourcing models and guidelines, but the publication is commercially focused and takes a broad approach. Case studies, volunteer surveys, and reports that focus on the LAM sector and citizen science projects currently provide the most relevant information for managers seeking to invite, instruct and incentivize volunteers effectively.

Based on her experience as manager of the Trove historical newspaper project at the National Library of Australia, Holley (2009, 2010) provides ‘tips’ that serve as a basic framework for crowdsourcing initiatives. Holley identifies the main elements impacting on online visitor behaviour, and emphasizes the importance of clearly stating the goal of the project, identifying ‘the crowd’, understanding volunteer motivations, and providing relevant incentives. The online environment must be intuitive, reliable, quick and easy to use, and include a “transparent and visible chart of progress”. Holley suggests volunteers should be given the choice to identify themselves on the site and receive acknowledgement, and be provided with tools to contribute to a dynamic, supportive team environment. Inviting feedback from volunteers from the early stages of project development helps to ensure the crowdsourcing platform meets users needs.

Howe’s (2009, p. 282) observations on the importance of community are reflected in the LAM literature. A recent report on social metadata found that “a critical mass and sense of community—whether existing or created—generates more user contributions and more outreach to new communities” (Smith-Yoshimura, 2012, p. 5). A survey of Trove volunteers also found that creating an online environment of camaraderie would incentivize volunteers, who said they would work more effectively and feel more accountable if they felt they were part of a team or virtual community (Holley, 2009). The rise of the social web has seen the employment of virtual community managers to nurture, stimulate, and moderate online interaction between companies or organisations and the general public (Garrigos-Simon et al., 2012; Rosenkranz & Feddersen, 2010). This role is also relevant for crowdsourcing,

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as online communities can be difficult to build and maintain, and need to be actively managed (Howe, 2009, p. 181; Kanter & Fine, 2010).

## **2.5. Moderation and evaluation**

The quality and cost-effectiveness of crowdsourced contributions is being widely discussed among LAM professionals and the research communities that hope to benefit from the collection or resource (Oomen & Aroyo, 2011; Ridge, 2012; Rockwell, 2012; Simon, 2010). However few case studies to date include the kind of budget breakdowns, project management assessments and task allocation comparisons that are most useful to LAM managers considering crowdsourcing as a business model. In the case of Transcribe Bentham, Causer, Tonra & Wallace (2012, p. 131) make the point that full-time paid research associates would have transcribed more than twice the number of manuscripts as volunteers within the same time frame. Instead, the research associates spent much of their time moderating volunteer contributions, developing and managing the online platform, and recruiting volunteers. On the face of it, the project seems to have been not very cost-effective, however, they emphasise that they would never have been granted funding for expert transcription alone. Furthermore, crowdsourcing offers more benefits for the organisation and the volunteer than the mere completion of tasks. As Holley (2009) explains, “The social impact the service is having in the community and to individuals is equally as important to users as the improvement to the data. The Library has been unable to quantitatively measure either thing”.

### **3. Recommendations**

#### **3.1. Understand the context and convey the benefits**

Managers seeking to convince stakeholders of the suitability of crowdsourcing need to understand the context, how it might be perceived, and how it is being used in the LAM sector. Some stakeholders will see this new business model as a solution, others as a threat; a familiarity with key studies, such as Howe (2009), Shirky (2010), and Holley (2010), will better equip managers to field queries and manage expectations. It's important to convey the benefits of crowdsourcing beyond potential cost-effectiveness, such as the knowledge, diversity, enthusiasm, and commitment that volunteers can bring to an institution.

#### **3.2. Choose the approach and clearly define objectives**

Crowdsourcing projects should be of genuine value to the institution and its users, and this needs to be clearly conveyed in the invitation to participate. A review of existing processes, and projects that currently demand more resources than the institution has available, will help managers to identify potential tasks that could be undertaken by volunteers online. The number of crowdsourcing projects driven by LAMs is growing rapidly, and a wide range of approaches is being employed. Managers can learn much by undertaking an informal survey of some of these projects, and briefly participating (see Appendix for examples).

#### **3.3. Identify the crowd and understand their motivations**

Crowdsourcing can be an effective way of connecting with subject specialists and enthusiasts. Making early contact with specialist groups, and making the effort to understand their motivations to participate, will enable project teams to develop appropriate incentives and a system that meets user needs. More can be learned about 'the crowd' during the course of the project, through user registration, online feedback channels, and volunteer surveys, which can inform further optimization of the platform for participation. Tapping into existing networks can provide a foundation for the project's online community, but appropriate resources should also be allocated to developing and sustaining an active community, particularly if the project is ongoing.

### **3.4. Support participation**

Crowdsourcing tasks should be broken down in a way that's manageable, meaningful and challenging for volunteers. Whether the crowdsourcing software is adapted or custom-designed, it's essential that it effectively and efficiently supports the project objective and volunteer participation. Familiarisation with Simon's (2010) work is recommended for gaining an understanding of the underlying principles of design for participation. Project resources should be allocated to staff or contractors with design and usability expertise, and for volunteer support and moderation throughout the course of the project.

### **3.5. Evaluation**

Perhaps one of the most challenging aspects of crowdsourcing for LAMs is measuring return on investment (ROI). Crowdsourcing is a new business model, and there is insufficient research available on best practice for the LAM sector. New project teams generally learn from those projects that have preceded them, and there is still an element of experimentation. For this reason, crowdsourcing projects may raise the profile of an institution and benefit from a reasonably high level of engagement, and yet prove to be less cost-effective than anticipated. In order to maximize ROI, managers should allocate resources to user testing at various stages of development, and online tracking of volunteer behaviour, as well as the necessary expertise to interpret the results and implement the necessary improvements. In addition, resources must be allocated to promotion and volunteer recruitment throughout the course of the project.

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## 4. References

- Afuah, A. (2009). Creating and Appropriating Value Using New Game Strategies. *Strategic innovation : new game strategies for competitive advantage* (pp. 91–117). New York: Routledge.
- Budzise-Weaver, T., Chen, J., & Mitchell, M. (2012). Collaboration and crowdsourcing: The cases of multilingual digital libraries. *Electronic Library, The*, 30(2), 220–232. doi:10.1108/02640471211221340
- Causser, T., & Wallace, V. (2011, May 26). *Character Journey*. Presented at the RunCoCo - Beyond Collections: Crowdsourcing for public engagement, University of Oxford. Retrieved from <http://podcasts.ox.ac.uk/series/runcoco-beyond-collections-crowdsourcing-public-engagement>
- Causser, T., Wallace, V., & Tonra, J. (2012). Transcription maximized; expense minimized? Crowdsourcing and editing The Collected Works of Jeremy Bentham. *Literary and Linguistic Computing*, 27(2), 119–137. doi:10.1093/lc/fqs004
- Chrons, O., & Sundell, S. (2011). Digitalkoot: Making Old Archives Accessible Using Crowdsourcing. *Association for the Advancement of Artificial Intelligence*. Presented at the Workshops at the Twenty-Fifth AAAI Conference on Artificial Intelligence. Retrieved from <http://cdn4.microtask.com/assets/download/chrons-sundell.pdf>
- Daft, R. L. (Ed.). (2008). Managing Change and Innovation. *The new era of management* (pp. 346–376). Cengage Learning EMEA.
- Estellés-Arolas, E., & González-Ladrón-de-Guevara, F. (2012). Towards an integrated crowdsourcing definition. *Journal of Information Science*, 38(2), 189–200. doi:10.1177/0165551512437638
- Garrigos-Simon, F. J., Lapedra-Alcamí, R., & Ribera, T. B. (2012). Social networks and Web 3.0: Their impact on the management and marketing of organizations. *Management Decision*, 50(10), 10–10.
- Gaule, A. (2011). The Strategic Context for Open Innovation. In P. Sloane (Ed.), *A Guide to Open Innovation and Crowdsourcing: Advice From Leading Experts* (pp. 60–64). Kogan Page.
- Holley, R. (2009). *Many Hands Make Light Work: Public Collaborative OCR Text Correction in Australian Historic Newspapers*. Australia: National Library of Australia. Retrieved from <http://www.nla.gov.au/openpublish/index.php/nlasp/article/view/1406/1688>
- Holley, R. (2010). Crowdsourcing: How and Why Should Libraries Do It? *D-Lib Magazine*, 16(3/4). doi:10.1045/march2010-holley
- Hopkins, R. (2011). What is crowdsourcing? In P. Sloane (Ed.), *A Guide to Open Innovation and Crowdsourcing: Advice From Leading Experts* (pp. 60–64). Kogan Page
- Howe, J. (2006). The Rise of Crowdsourcing. *Wired*, 14(06). Retrieved from <http://www.wired.com/wired/archive/14.06/crowds.html>
- Howe, J. (2009). *Crowdsourcing: why the power of the crowd is driving the future of business*. New York: Three Rivers Press.
- Jenkins, H. (2006). *Convergence culture : where old and new media collide*. New York: New York University Press.
- Kanter, B., & Fine, A. H. (2010). *The networked nonprofit : connecting with social media to drive change*. San Francisco: Jossey-Bass.
- Leadbeater, C. (2004). *Pro-Am Revolution*. Demos. Retrieved from <http://www.demos.co.uk/publications/proameconomy>

- McKinley, D. (2012). Practical management strategies for crowdsourcing in libraries, archives and museums. Retrieved from <http://www.digitalglam.org/crowdsourcing/crowdsourcing-strategies/>
- Newman, J. (2012). Revisiting Archive Collections: Developing Models for Participatory Cataloguing. *Journal of the Society of Archivists*, 33(1), 57–73.  
doi:<http://dx.doi.org/10.1080/00379816.2012.666404>
- Oomen, J., & Aroyo, L. (2011). Crowdsourcing in the cultural heritage domain: opportunities and challenges. *C&T '11 Proceedings of the 5th International Conference on Communities and Technologies*. (pp. 138–149). doi:10.1145/2103354.2103373
- Owens, T. (2012, May 20). The Crowd and The Library [Weblog post]. Retrieved from <http://www.trevorowens.org/2012/05/the-crowd-and-the-library/>
- Ridge, M. (2012, July 16). *On the Internet, nobody knows you're a historian: exploring resistance to crowdsourced resources among historians*. Presented at the Digital Humanities conference 2012, Hamburg, Germany. Retrieved from <http://lecture2go.uni-hamburg.de/konferenzen/-/k/14007>
- Rockwell, G. (2012). Crowdsourcing the Humanities: Social Research and Collaboration. In M. Deegan & W. McCarty (Eds.), *Collaborative Research in the Digital Humanities* (pp. 135–154). Farnham: Ashgate.
- Rosenkranz, C., & Feddersen, C. (2010). Managing viable virtual communities: an exploratory case study and explanatory model. *International Journal of Web Based Communities*, 6(1).
- Sherman, A. (2011). *The Complete Idiot's Guide to Crowdsourcing*. New York: Penguin.
- Shirky, C. (2010). *Cognitive Surplus: Creativity and Generosity in a Connected Age*. New York: Penguin Press.
- Simon, N. (2010). *The Participatory Museum*. California: Museum 2.0.
- Smith, A. (2011, May 26). *A Cautionary Tale*. Presented at the RunCoCo - Beyond Collections: Crowdsourcing for public engagement, University of Oxford. Retrieved from <http://podcasts.ox.ac.uk/series/runcoco-beyond-collections-crowdsourcing-public-engagement>
- Smith-Yoshimura, K. (2012). *Social Metadata for Libraries, Archives, and Museums: Executive Summary*. Ohio: OCLC. Retrieved from <http://www.oclc.org/research/publications/library/2012/2012-01r.html>
- Sollish, F., & Semanik, J. (2011). Solicitation of Bids and Proposals. Solicitation Planning. Solicitation Methods. *Strategic global sourcing best practices*. Hoboken, NJ.: Wiley.
- Taranto, B. (2011, December 12). *Crowd Sourcing Metadata*. Presented at the Coalition for Networked Information (CNI) Fall 2011 Membership Meeting, Arlington, Virginia. Retrieved from <http://vimeo.com/38196574>
- Terras, M. (2010). Digital curiosities: resource creation via amateur digitization. *Literary and Linguistic Computing*, 25(4), 425–438.
- Terras, M. (2012). Present, Not Voting: Digital Humanities in the Panopticon. In D. Berry (Ed.), *Understanding Digital Humanities* (pp. 172–190). Hampshire, UK: Palgrave Macmillan. Retrieved from <http://www.palgrave.com/products/title.aspx?pid=493310>
- Williams, C. (2008). Designing Adaptive Organizations. *Effective Management* (pp. 208–239). Cengage Learning.
- Yuen, M., King, I., & Leung, K. (2011). A Survey of Crowdsourcing Systems. *2011 IEEE International Conference on Privacy, Security, Risk, and Trust, and IEEE International Conference on Social Computing* (pp. 766–773). Retrieved from <http://www.iisocialcom.org/conference/passat2012/PASSATProceedings/data/4578a766.pdf>

## 5. Appendix: Selected crowdsourcing projects

### **Citizen Archivist, US National Archives**

Volunteers are invited to tag images and records, transcribe historical documents, help index the 1940 census, contribute to articles and share photographs.

[www.archives.gov/citizen-archivist](http://www.archives.gov/citizen-archivist)

### **Civil War Faces, Library of Congress**

The Library of Congress is calling on the crowd to help identify people and photographers in the Liljenquist Family collection of ambrotype and tintype photographs from the Civil War.

[www.flickr.com/photos/library\\_of\\_congress/sets/72157625520211184/](http://www.flickr.com/photos/library_of_congress/sets/72157625520211184/)

### **Click! Brooklyn Museum**

A photography exhibition that invited museum visitors, the online community, and the general public to participate in the exhibition process.

[www.brooklynmuseum.org/exhibitions/click/](http://www.brooklynmuseum.org/exhibitions/click/)

### **Digitalkoot, National Library of Finland**

Online volunteers proofread and correct OCR text from digitized historical newspapers. Microtasks are presented in the form of games.

<http://www.digitalkoot.fi/en/splash>

### **The Great War Archive, Oxford University**

The Archive contains digitized images of items contributed by the general public in 2008, via a website and a series of open days at libraries and museums throughout the UK. <http://www.oucs.ox.ac.uk/ww1lit/gwa>

### **The Indexer, ArchivesNZ**

Volunteers will be invited to transcribe digitised index cards in order to make archival material more discoverable online (Launching 2013).

<http://archives.govt.nz>

### **Map Rectifier, New York Public Library**

Online volunteers use the NYPL Map Warper tool to digitally align or “rectify” historical maps from the NYPL’s collections to match contemporary maps.

<http://maps.nypl.org/warper/>

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### **Search the Collections, Victoria and Albert Museum**

The V&A database contains various images of the same object, some of which may not be the best view to display on the homepage of Search the Collections. Online volunteers choose the best crop from a selection of object images.

<http://collections.vam.ac.uk/crowdsourcing/>

### **Steve, Social Tagging for Cultural Collections**

Volunteers are invited to help museums describe their collections by applying keywords, or tags, to objects.

<http://tagger.steve.museum/>

### **Transcribe Bentham, University College London**

Volunteers transcribe and encode digitized historical manuscripts using an online task interface. [www.ucl.ac.uk/transcribe-bentham/](http://www.ucl.ac.uk/transcribe-bentham/)

### **Trove, National Library of Australia**

Online volunteers proofread and correct OCR text from digitized publications. Trove also invites users to tag, comment and contribute images.

<http://trove.nla.gov.au/>

### **What's on the menu? New York Public Library**

Volunteers transcribe individual dishes and prices from digitized historical restaurant menus using an online task interface.

<http://menus.nypl.org/>

### **What's the score at the Bodleian? Bodleian Libraries, University of Oxford**

Online volunteers help to describe digitized musical scores from their collection.

[www.whats-the-score.org/](http://www.whats-the-score.org/)

### **Your Paintings, Public Catalogue Foundation & BBC**

Online volunteers tag paintings to enable searching by type, subject, and style or movement.

<http://tagger.thepcf.org.uk/>