

**BACLS** 

**GUIDANCE** 

**SHEETS** 

## **AHRC Technical Plan Tips and Tricks**

- Do not write a technical plan for a blog or other minor technological communication platform; it's not necessary. As the guidance says: "You do not need to complete a Technical Plan if your only proposed digital output or technology consists of webpages containing information about the project (as opposed to data produced by the project)."
- Enlist the support of your institution's IT department early on. You need to give specific details throughout of which you are likely to be unaware.
- Do not simply re-state the criteria in your application. For instance, when asked to ensure the ongoing sustainability of the initiative for five years after the project, many poor plans read: "The resource will be maintained for five years after the project's conclusion". A better answer would be: "X University's IT department commits to maintaining and preserving the resource for five years after the project's conclusion. This is part of a university-wide policy on preservation for externally funded resources. [Footnote to policy.] Staffing for preservation and ongoing maintenance will be provided by the university's IT department. Hosting costs for ongoing availability will be met through the university's IT budget."
- Think about re-use and try not to be too proprietary. Unless there are good reasons of external copyright or privacy, you should place your digital resources under an open license (and speak to your institution's copyright librarian to discuss this). As a public body, the AHRC has a duty to ensure re-use is available to UK taxpayers. Therefore, if you opt for a non-commercial license, for example, this cannot just be for your personal preference, but instead needs a strong rationale. Likewise, if you are having software developed for the project by an external agency, ensure that this will be open source and released under a license that facilitates re-use. This would be a good statement on software, for instance: "We will contract Agency X to develop the main platform, which will be written in Python/Django using a MySQL database. The source code for the platform will be made available openly on Github and will be released under a Free Software Foundation-approved license in order to facilitate re-use".

The official guidance on this reads: "The AHRC normally expects digital outputs that are preserved and/or sustained to be freely available to the research community. Where sustainability plans are made, you must provide justification if you do not envisage open public access for data and open-source status for software that you create or develop; you may make a case for charging for or otherwise limiting access and it will be considered on its merits, but the default expectation is that access will be open. Where digital outputs are preserved but not sustained, the expectation is that they should be freely available on request, but again a case may be put forward to the contrary and will be considered on its merits."

- Give a detailed breakdown of hardware and software used in the project. If you are taking images, for instance, give the specifications of the hardware (scanner or camera). Detail the image formats for both archival preservation and public availability. Speak with your IT department about these formats and ensure that there is a good rationale for them. For instance, if recording audio and you choose the FLAC format, a good rationale might read: "Audio files will be disseminated and preserved in the Free Lossless Audio Codec (FLAC) format. This yields a lossless rendition of the original recording while still giving substantial compression gains over WAV files. The encoding and decoding routines for the format are open source, thereby giving assurance that the format will be readable for the foreseeable future." If there are best practice guides for archival preservation formats in the area you are working, follow them.
- Details of the preservation infrastructures that you will be using are helpful. For instance, give as much information as possible about the backup procedures: "The data will be stored on X University's shared hosting facility. These servers are hosted in UniversityTown and run a RAID 5 block-level striped disk setup with distributed parity for secure redundancy. This will be mirrored, nightly, to an off-site second server in OtherTown using the same configuration. Tape drive backups are taken bi-weekly and are stored in a third location to provide distributed redundancy against natural disaster. The University's policy on data preservation, of which this forms part, can be read here: http://www.university.ac.uk/preservation" [technically, external links aren't allowed, but I never find it hurts, really, to have reference to such information put it in a footnote as a reference, if in doubt]
- Think about ongoing backup in the field and have multiple systems in place. For
  instance, if you are doing off-site interviews, ensuring that these are backed up to
  cloud systems before you make the journey back is a good idea; many projects are
  destroyed through stolen laptops on trains, spilling tea over hard disks etc. This
  might require you to purchase a portable wifi hotspot, which would be a legitimate
  expenditure if justified here.
- Your personal backup should not be a manual "I will back up my data by copying it
  to a USB stick or external hard drive". If the backup approach is manual, you won't
  always do it and the one time that you don't do it will be the one time that you lose
  the data. You need an automatic, distributed approach. Dropbox is an acceptable

front-line backup solution, but also consider a second strategy, such as Crashplan. A good statement might read: "Interview data will be immediately backed up, after the interview and on-site, to Dropbox and to Crashplan using the portable wifi hotspot. This mitigates the risk of data loss en route back from the interview site. Similarly, daily backups will be made using these continuous backup solutions, to guard against the danger of human error inherent to manual approaches. These services both employ high-grade encryption to ensure the privacy of interview files while in transit. Access to the backups will be secured with passwords of at least 33 characters and 2-factor authentication."

- Do not blag it if you are not sure of something. Instead, check with someone who
  knows (institutional IT support, for instance). Technical plans are not read by the
  academic moderation panel (though most have a technical member on board) but
  by someone who does know their stuff, so any attempt to pass something off will be
  caught.
- Integrate the technical plan into the proposal. Do not simply think of your technical outputs as bolt-on extras, but ensure that you have considered the implications throughout. Properly budget for technical aspects and treat your digital objects as first-class outputs, not just secondary to your monograph or more conventional academic artefacts.
- Give timelines and costings for digital objects/outputs and treat them as important.
   Ensure that you have got multiple quotes if you are doing external development work so that you can demonstrate value for money and/or run an open commissioning process.
- Give examples of successful strategies that you, your institution, or any outside
  agency have had in producing and maintaining digital projects. For instance, noting
  a portfolio of long-running outputs from any contractors would be helpful. If your
  institution has already managed digital resources for an RCUK project, list this: "X
  University has already demonstrated that its preservation and access policy is
  working, having successfully hosted and maintained over five previous RCUK
  projects. [Footnote list them]"
- Consider the specifics of the digital medium in which you are working and the
  intersection with sociological aspects. For instance, what are the quality assurance
  procedures for digitisation of an archive? How are your technical aspects of
  dissemination compatible with interview requirements for anonymity/privacy?
- List the sources of expertise that you have on hand at your institution. Explicitly name the staff members and their expertise within your IT department.
- Consider having a technical steering board with relevant expertise to help guide and monitor the implementation of the digital elements of your project.
- Think by what metrics you will appraise the success and usage of your digital artefacts. Also take care to note that all metrics are flawed proxies for actual

- use/reading. Hits/downloads are good milestones, but they do not indicate actual impact, only that someone has downloaded the objects.
- Explain how you will document your technical objects/platforms/artefacts and what metadata standards you will use to ensure that anyone finding your objects be they images, interviews or software will be able to understand and use them.
- Finally, read the guidance.
   http://www.ahrc.ac.uk/funding/research/researchfundingguide/attachments/technical plan/

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