

Data gathering 1

Preview

Introduction

Data gathering is at the core of all research. Without factual material there is no basis upon which to draw reasonable conclusions. Although this statement may be obvious, it should be acknowledged that methods of gathering data have many different characteristics and therefore a variety of appropriate uses. When selecting any data-gathering method you need to assess:

- whether it will help deliver the data you need to answer your question; and
- whether the data will be in a format capable of analysis.

This topic therefore introduces a range of data-gathering methods and techniques including:

- archival and institutional techniques;
- field collecting;
- the Internet;
- focus groups;
- observation;
- projective techniques;
- panel studies; and
- test marketing.

A good understanding of these will not only help you design your research project, but will also provide the background knowledge to confidently select and apply different methods in your professional career. Because there is a lot of material to cover, we have split this topic into two manageable parts. Data gathering 2 (topic 7) will deal with the theory and methodology of sampling.

Archival and institutional techniques

Using a library is one form of archival research, but archival research can also focus on institutional records and documents and even museum collections. Art galleries and museums and organisations such as the Australia Council all have archives which may be possible to visit for the purposes of research. The Performing Arts Museum and Screensound Australia, for example, have lots of data which may be accessed by program researchers.

Because this is a postgraduate course, we assume that you have some familiarity with archival research. It is therefore not our purpose here to explain how to do it, but when planning your project it is worth considering some of the issues we will raise here.

Consider the aims and parameters of your project when thinking about archives. Searching through documents at a public records office may not necessarily deliver the kind of data you need to solve your problem, while surveying local council records documenting expenditure on public arts programs may be just the thing.

Next, plan ahead, because although most archives of public institutions are available to the public, in practice there are usually substantial hurdles which seem almost to have been erected just to frustrate your progress. In some cultural institutions, for instance, it is not uncommon for staff to claim they are overworked, have other priorities, and are therefore unable to countenance your obscure inquiry. Opening times and other operational rules may also be frustrating, and, in the case of private companies, you cannot assume you will necessarily be able to gain access at all.

The best way to get help from others is to demonstrate that you have explored all the other available avenues to related data before you approach them. In other words, do not expect gallery staff or archivists to do your basic groundwork for you. For instance, if you want to find out which regional galleries have paintings by Arthur Boyd in their collections, look at published sources such as catalogues or annual reports, or search Australian Museums Online (AMOL) to form an initial inventory. Then, when you make contact, you can write or speak with some authority, demonstrating some knowledge of the subject. Show how the information you need from the organisation will progress your research, and ask clearly thought-out and well-constructed questions.

If you need to access particular archives for your project, make sure that you plan your visit in advance. Check practical matters such as photocopying procedures and exercise common courtesies such as arriving on time.

Professionals also construct their own archives. Collecting information relevant to your interests and storing it methodically in an organised filing system can often save you time in the future.

Collecting data in the field

In the work of zoological, botanical and geological curators, collecting data in the field is one part of a research process aimed at learning more about their collections and contributing to the body of scientific knowledge. Museum archaeologists may also go on field trips to dig for artefacts, or study remnants from the past, hoping that the data they collect may add another piece to a giant jigsaw puzzle. In the process they pay a great deal of attention to documenting and contextualising the locations of their data. Although curators will collect specimens for museum collections, they are also keen to study things in their natural environments.

Arts business research might also involve field research. For instance, suppose you are asked to conduct research into the activities and lifestyles of craftspeople in Tasmania. Your Minister has posed the hypothesis that 'craft is an irrelevant anachronism, and no longer a viable occupation'. If this is true, the Minister says, providing funding is clearly a waste of the taxpayer's money. To test this hypothesis, you could dispatch a questionnaire by mail, asking how much money each respondent earned from craft in the past twelve months and this would probably demonstrate a very low level of earnings. Critics, however, are likely to see the results as being of little value, and the argument for cuts unpersuasive because your income survey fails to adequately contextualise the respondents' lifestyle. Your report would

probably be more accurate, and certainly richer, if you visited each person and supported your economic findings with insights into the social, political and geographic contexts in which craftspeople live and work. These can be gained from collecting the data in the field.

READING **Now read Alexander (1979), 'Museums research'. It includes some surprising discoveries made by observation in the section entitled 'Audience research beginnings'.**

EXERCISE 6.1 **A survey of Tasmanian craftspeople presents a number of specific problems for the researcher. Make a list of the practical and logistical issues which you would need to consider when planning this survey.**

The Internet and the World Wide Web

The Internet is becoming an increasingly convenient means of gathering information. But before you log on again, remember the difference between information and data. Data is the raw material from which information is formulated.

The Internet is an extremely useful tool for conducting literature searches, because it enables you to access specialist databases which will in turn lead you to reference material. Accessing specialist sites will also provide lots of information and links to other relevant sites. Nevertheless, for our purposes, it is important to remember that information carried on the World Wide Web is mostly mediated by others; it is not normally raw data.

There are some exceptions. In the museum sector, for example, a service like Australian Museums Online (AMOL) provides a gateway to many museum collections. This can be useful for finding the locations of objects, particularly in regional institutions which are geographically difficult to access. However, remember that this data is still mediated by others and the quality of records is variable. As a general rule, researchers should always maintain a degree of scepticism when using information and should double-check information where possible.

So how does the Internet help with gathering data? It would be foolish not to recognise that this is a rapidly developing field. In the electronic environment, e-commerce applications and software packages are being designed to continuously track the online behaviour of consumers, and to produce sophisticated data.

Email is another Internet tool which may help you to gather data. Electronic mail offers you the capacity to communicate with others quickly and efficiently. It provides a way of conducting a formal online survey, or to simply canvas the opinions of others on a particular issue.

The following is an example of an email survey posted on a museum industry bulletin board accessed by subscribers. Read this carefully and think about how the researcher has applied this data collection method. Think about who the perceived respondents are, and whether the format encourages a response.

As part of a research project I am undertaking I would like to find out some very basic information in respect of how institutions manage their image collections (slides, photos, etc.). My focus is on institutions in Australia and New Zealand, but any input of interest is welcome. The main areas I am interested in are cataloguing and retrieval/access of images,

both in digital and hard copy form. Any responses to the following questions would be greatly appreciated. If anyone is interested in the results, e-mail me direct and I'll forward a copy after summarisation.

Thanks in advance to all respondents.

Name of Institution:

1/How large is your institution's image collection?

2/What percentage of the collection is in digital format (e.g. scanned)?

3/What software is used for cataloguing and retrieval of the images (digital and/or hard copy)?

4a/Subject index—how is the image described? E.g. how would a photo of a building with a specific address be catalogued?

4b/What search parameters/method would be used to retrieve that image later?

5a/Does your institution plan to change the way in which image cataloguing/retrieval is carried out?

5b/If so, how?

6/Any other comments on the areas of image cataloguing and retrieval?

Thanks to all for any help!

(Gordon 1999)

If you think an online survey might be a useful method for gathering data, then you need to give serious consideration to the reasons why it is beneficial, the methodology you need to employ, and, importantly, to ethical issues such as confidentiality. One obvious limitation to conducting a survey via email is that respondents need to have access to the system on a regular basis, and this will directly affect the range of replies you receive.

Exploratory techniques

Focus groups

A focus group is a group of people brought together by a researcher to discuss a particular matter. Normally these discussions are conducted by professional people such as psychologists who have specialist moderator skills, but simpler forms of discussion groups can often aid organisational and event planning. Obtaining feedback on program ideas or gaining insights into the public's perception of an organisation, for example, lend themselves to this kind of technique.

Because focus groups are conducted in an unstructured manner, usually in a relaxed environment such as a lounge room, it is hoped that data can be collected from the flow of conversation between group members. This is a qualitative technique and therefore it will not deliver facts and figures but impressions and opinions. For instance, focus groups may help in defining problems, generating hypotheses and determining the subject matter of future surveys and studies.

As a researcher it is your role to convene and conduct the group. This means you must be aware of a range of practical and theoretical issues. Here are some key issues of which you should be aware if you intend to use this technique.

The number of participants

Usually a focus group includes between six and twelve people. The reasons for this are logistical: under six, and the group may be dominated by one or two individuals, over twelve and the group becomes unmanageable. In arranging your group always consider the possibility of no-shows, and other practical things like the costs involved. Some organisations find it appropriate to offer a substantial incentive to encourage participants to attend.

The composition of the group

There is no fixed answer to the question of who should make up the group. This will be determined by your aim and subject. In selecting a group though, it is worth considering such issues as whether the mix of people (old and young, female and male) will either enhance or impede the discussion flow. It is generally better not to include people who know each other in the same group.

The moderator

Moderating is a skilful and important job. Once the conversation has started it is the moderator's job to keep it going. Moderators keep the participants on the subject, lead them into areas of the researcher's interest, keep individuals from overshadowing each other, make sure that shy participants get to have their say, keep an eye on everyone's body language to judge unspoken reactions, and make everyone feel thoroughly comfortable and unthreatened throughout.

Gathering information

In a focus group it is advisable to tape the proceedings, either with audio or video, and to augment this with your own notes (on body language, for instance). The successful moderator will therefore prevent people from talking at the same time and also try to remain silent unless it is absolutely necessary to kick-start the proceedings. Some focus-group discussions are held in an environment where relevant staff can view proceedings through a one-way window.

This mode of investigation raises many ethical issues, especially if conducted by a member of the university community.

Observation

Observation is one way in which human beings learn. As children we observe our parents and are influenced by their behaviour. In business many advances are made through observing what the competition has done. Museum professionals often look at displays and installations when they travel, they gather ideas and formulate opinions about labelling and lighting through observation. Theatre managers may gauge the likely success of a production by observing the response of the audience at dress rehearsals or on the opening night.

Observational research is therefore concerned with studying the behaviour of consumers in either a natural setting or a laboratory setting. This is conducted in two basic ways, differentiated on the basis of whether or not the researcher is involved with the group being studied. Audience watching, for instance, is a form of non-participant observation conducted in a natural setting. The observer is separate from the activities taking place and the subjects of the research may or may not know they are being observed. A natural setting is defined as a place which would have existed had researchers never visited it. On the other hand, participant observation is a method of data collection where the researcher is fully involved with the participants and the phenomena being researched.

Before deciding whether to use these techniques of gathering data you are advised to read about the problems of bias. For instance, the theatre manager observing the favourable reaction of an opening night audience may be very pleased, but they may also be drawing a conclusion about the likely future success of the production based on a very narrow sample which is not representative of the general public. Other things to consider include the effect that being watched has on a participant's behaviour, and the ethical implications of observing people without their permission.

Projective techniques

'Projection' is one of the most useful concepts in research. It takes many forms: it can be used as a research technique in its own right or in conjunction with personal interviews, focus groups, and variously administered questionnaires. Like observation, deduction and induction, a clear understanding of the concept and an awareness of its possibilities can be helpful not only in your research work, but in many other instances which have nothing whatsoever to do with research.

The word 'projection' is taken from Freudian psychology. It originally referred to the tendency that people have to externalise; that is, to 'project' thoughts or feelings upon other people. Freud discovered that his patients often did not want to accept responsibility for certain acts or feelings, and thus unconsciously projected them onto someone else—their father, mother, another sibling, or even the psychoanalyst, Freud himself.

A well-known example of projection in psychology is the Rorschach, or 'ink-blot', test. What the subjects see in the nondescript 'blots' are their own purely subjective projections.

In our everyday lives we do something similar in relation to the physical world. Technically, it is called 'projective empathy'. We project our own feelings, emotions, and sensations into

countless objects and scenes. We speak of church spires as ‘soaring’, for example. Or we speak of the squat structural columns in a low-roofed parking lot as appearing ‘crushed’ by the weight of the roof. And extremely cantilevered roofs appear ‘precariously balanced’. The interesting point here—and in countless other examples—is that these are not merely clever, or clichéd, words. We truly feel within us that sense of soaring, or of being crushed.

What we mean, more precisely, when we speak this way is this: ‘Were I in such a situation as that column, then I would certainly feel crushed’. We imbue the column with our empathy for it, or in other words, we have projected our feelings onto it. When we see two paintings on the wall that are, in our opinion, too close together, we say they are ‘crowded’, or even that ‘they don’t seem comfortable like that’. In fact, the paintings are hardly ‘crowded’ or ‘uncomfortable’. They couldn’t care less about the truth of the matter, which is, of course, that those are the feelings which we would experience if we were in their place.

In this particular instance, it is interesting to conjecture how people of different nationalities would react. Since ‘personal space’ differs for various cultures, a person of one nationality, for example, might find the same paintings ‘crowding’ each other, which someone of a different nationality might not.

In a similar vein, Bertrand Russell wrote this in *An Outline of Philosophy*:

One may say broadly, that all the animals that have been carefully observed have behaved so as to confirm the philosophy in which the observer believed before his observations began. Nay, more, they have all displayed the national characteristics of the observer. Animals studied by Americans rush about frantically, with an incredible display of hustle and pep, and at last achieve the desired result by chance. Animals observed by Germans sit still and think, and at last evolve the situation out of their inner consciousness. To the plain man, such as the present writer, this situation is discouraging. I observe, however, that the type of problem which a man naturally sets to an animal depends upon his own philosophy, and that this probably accounts for the differences in the results.

(Russell 1927, pp. 32-3)

This sort of thing can become quite complex if we hold our discussion to the realm of psychology. For example, *projection* is often indistinguishable from its opposite, *introjection*. Introjection occurs when, rather than projecting our own feelings onto something external to us, we draw to ourselves the apparent sensations, physical situation and so on, of that external person or object. When someone strikes their head on something, we instantly wince in sympathetic response. If we are used to driving, but are in the passenger seat when our friend is driving, and the car in front of us brakes suddenly, our right foot, perhaps even an instant before our friend’s, presses hard against the floor of the car. We have ‘introjected’ their reaction. Without doing much good, either, in this case.

These tendencies to project and introject are probably unavoidable. Koestler put it well in his book *The Act of Creation*:

The tendency to project unconsciously life and feeling into inanimate bodies is well-nigh irresistible—witness the two millennia of Aristotelian physics; we can only conclude that it is a basic feature of our psychic make-up.

(Koestler 1964, p. 296)

For most purposes—certainly in research—these two concepts, projection and introjection, often overlapping and difficult to distinguish from each other, are simply called ‘projection’. With this necessarily short overview in mind, we can now consider the uses of projection as a research tool.

The use of projection in research need not necessarily be in the form of one of the specific techniques mentioned in the readings. It can simply be a series of photographs of various types of people whose views you might ask the respondent to guess. It is remarkable how unhesitatingly most respondents give detailed information—especially for the photograph of the person most like the respondent.

Proposed advertisements are often tested with different types of people in both depth interviews and focus groups, with discussion flowing much more freely when the group can project their feelings onto the people in the advertisements.

Sometimes it is virtually impossible to elicit people's true feelings when questions are asked directly. The 'barrier of inadmissibility and self-incrimination' is especially hard to overcome. When German magazine *Der Spiegel* wanted to discover the real feelings of former West Germans after the Berlin Wall had been down for a year and the initial elation had dissipated, they asked in an indirect way, allowing the respondents to project their answer onto someone else. The question was 'How many West Germans do you think wish that reunification had not taken place?' rather than 'Do *you* wish that reunification had not taken place?'. It might seem a subtle distinction, but it was a clever way to get closer to the truth. (If you are curious about the results in that case: 28% chose 'Most', 38% chose 'About Half', 34% chose 'A Minority'.)

The idea of projection as a tool in research may well be new to you, but most of us have probably been using 'third-person thinking' for quite some time as an aid to making decisions in our personal life, or in solving problems of various sorts. When we ask ourselves questions like 'What would I recommend to someone else if they were in my predicament?' we are using projection. And, in the same way as when it is used in research, this helps us to become both more objective and less inhibited in our thinking. We can thus see the problem at hand more clearly, and be more confident about deciding upon an appropriate action or response.

Panel studies

For the sake of completeness in our coverage of research techniques, we include a few words here about 'panels'. This technique is common in market and consumer research. A 'panel' is a group of individuals who agree to provide information to a researcher over a period of time. There are essentially two types of panel: 'continuous' and 'interval'. In a continuous panel the members report on a regular basis. Purchase behaviour and media exposure are the categories usually reported on. They do this via self-administered questionnaires, simply called 'diaries'.

In the interval technique, people agree to complete a number of mail questionnaires during their tenure as a panel member. Unlike the continuous panel, the interval panel members only respond when required, for example, in response to occasional questionnaires relating to the introduction of a new product or a new marketing strategy.

Test marketing

Test marketing is primarily used in product research. It is a field experiment in which a product is introduced to a small, representative portion of the market. It can lead to dramatic developments—sabotage by competitors by heavily discounting their own similar products once they discover you are doing a test, copying your idea and trying to beat you to the marketplace, buying up your product to keep you from getting any viable sales statistics, or perhaps even giving you a false sense of optimism, causing you to waste your money on a future nationwide launch.

The Kodak article you have just read tells a story of classic product-oriented test marketing. Kotler and Kotler, however, have identified three ways in which test marketing is used by museums in the course of refining exhibition themes and concepts. In many respects these techniques also lend themselves to the test marketing of theatre productions. These are:

- *Front-end evaluation*: This is used by exhibit developers to conceptualize and plan an exhibition; it involves a sample of museum goers, who are asked for their reactions to exhibition concepts, goals and plans.
- *Formative evaluation*: This involves surveying public responses to exhibition prototypes, as a way of assessing the effectiveness of exhibit elements; often this research focuses on discrete exhibit elements rather than the entire exhibit.
- *Summative evaluation*: This research involves responses to exhibition design, elements, and other aspects in the context of the entire exhibition.

(Kotler & Kotler 1998, p. 152)

We might also add that it is often the case that a museum will look at the possibility of touring an exhibition it has developed to other venues based on an evaluation of the success of the original show. This too, may be the case with theatre productions which are trialed in small theatres before moving to a more prominent venue.

Review

Summary

In this topic we have introduced data-gathering methods and techniques which you can use for your own research projects or apply in your professional environment.

References

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