ADUK resource sheet

Stringing the pearls together - how do I actually go about doing this?

Beth Aplin, Henderson Aplin Partnership

Planning for action
The previous resource – *Identifying the Pearls* [insert link] – covered the first part of the process:

- You decide once and for all to jolly well gather some visitor data
- You sit down and consider what is important to you
- You work out what you already know and think about how each answer will actually help you
- You involve lots of other people within the organisation at this point. Get their own important issues
- All of you consider what you estimate the answers to be and start to consider what some unexpected findings might mean (this gets people really interested)
- You do some hard thinking about what you can afford (both in terms of time and money) and what you can realistically manage.

This resource picks up the baton from this point and will guide you through planning a small in-house research project doing face to face questionnaires to existing visitors. It outlines a simple 10-step suggested approach to get you started.

Step 1: create the project team
As an underlying principle I propose that you gather together a small team of keen staff members who are willing to get involved with the project (a good number of front of house staff will really be an asset here and involving them early on, will pay dividends). This small team can all pool ideas, give encouragement and actually carry out the survey, do the data entry with you and spread the findings throughout the organisation.
If you have carried out the general awareness raising ideas [insert link to earlier report] you will probably have found that a small number of staff members from different departments are just more keen and eager than others. I would strongly advise that you pick five or so of these (including more than one department can be really interesting and give a new dimension to all your research).
These people will help you in all aspects of the project and I am assuming this team approach from now on. You may like to involve a few other people to actually help with the questionnaires.

You can take two approaches:
1. Everyone in the team actually does everything. So everyone faces the visitors and asks the questions, does the data entry, unpicks the results, writes up the findings and shares the findings internally.
2. People select tasks they feel most confident with. So everyone is involved in the decision making and planning, but then split up into:
3. Group / person 1: people who face the visitors,
4. Group / person 2: others (or one) who does the data entry, and
5. Group / person 3: another who likes writing reports
6. And then perhaps you all share the findings internally.
Have a meeting, share your vision and from then on work as a team to actually make it all happen.

What, where, how – getting seven league boots to stride over the hills

Step 2: decide what to ask and how to phrase the questions

I have previously discussed the three key areas of visitor information you might be interested in: description (e.g. age, postcode), behaviour (e.g. how often do you visit? where else do you visit?) and attitudes and beliefs (e.g. what were you expecting to get out of your visit?). [link back to first resource]

Regardless of your specific burning issues, I would advise you to include a few questions from each area. This will give you a picture of the visitors you questioned and help you see if there are any strong trends, for example people with children were mostly much happier that those without.

There are three elements of questionnaire design:

1. The questions
2. The actual wording and possible options you give
3. The order of the questions and the layout

I think you will already be clear by this point about what questions you want to ask. So the next matter is how to phrase them.

There are two major types of question – Open and Closed:

Type and description	Advantages	Disadvantages
Open questions: where you ask a question without a clear yes or no answer and provide a space for the answer	You can get more of a flavour of what the visitor really thinks.	Can be very hard to compare different answers. You can end up with vague platitudes rather than actual answers (for example 'it was all great') Visitors might take a long time to think up detailed answers, and this is difficult when you are trying to ask a random sample of people.
Closed questions: where you ask a yes or no question or provide a list of possible answers which the visitor must chose from.	Much easier to gather the answers quickly and then put them into a spreadsheet. You can clearly compare one against the other	Might restrict people from giving the answer they really want to. You might miss some unexpected insights.

The general view is that it is better to ask the majority of questions as closed questions, but allow for one or two open questions at the end of the interview.

Some people think that personal details about age and location should be left to the end of the interview when people are more relaxed, happy to talk and feel they have made a real contribution.

There are no rights and wrongs here, but a good method is for you to choose a question and then all the project team individually try to come up with the best phrasing, then compare and discuss.

There are two areas where I would suggest some conformity:

1. Gather people's postcodes rather than just a general indication of how far they have travelled. This means you can pinpoint where they come from, and as you gather more and more data you can compare against TGI or other national databases.

2. There is huge disagreement within the whole arts sector about how to break down age into bands or categories, but I suggest that you strongly consider the TGI bands.
Again it means you can compare with national statistics and hopefully other organisations will follow suit.

Under 15	**15 – 24**	**25 – 44**	**45 – 64**	**65 and upwards**

How do we know people will understand the questions?
The best way to make sure that the visitors will understand your questions and staff will feel happy asking them is to do a small test. You can test all aspects of the survey – how you introduce yourselves, how you stand, how much eye contract you make, how you phrase questions and finally how easy it is to input the answers into your computer. You only need to do this a few times and it will make a big difference to how confident everyone feels and may save you from making a silly mistake.
I strongly advise you to put up a notice in reception so that all visitors can see it when they leave and understand what you are doing (and have other staff trained to explain what is going on). I always get jumpy at airports when I see some people being stopped and asked questions and not me. I am curious!

Step 3: decide who to ask
There are two ways to select people to be questioned:
1. Random sample – ask every fourth person who visits (for example) This means that everyone has an equal chance of being chosen.
2. Quota sample – ask each person who is in your chosen group (for example young people aged 15 – 24).
In both cases you should set a target number of visitors to ask – perhaps ten in each session? Also be aware that it is easy to feel uncomfortable approaching certain people. If your staff member has been trained to ask each tenth person and that person looks grumpy or unhappy there is a huge urge to skip onto a 'friendlier' looking next person. This does impact on the results. We want to find out what all your visitors think – not just the happy ones. [link to Orian's resource on monitoring diversity]

Step 4: decide where to ask the questions
You have three options about where you ask: as they come in, as they leave, halfway round. Obviously you will be able to ask different questions at each point. Asking people as they leave will enable you to gather information about how they found the experience in a way which is obviously not possible as they enter!

Step 5: decide who should be the interviewer
There will be some members of your project team who will be very happy to work with visitors to ask the questions. You may wish to involve a few others who are not part of your project team to help with this. They all need to consider how they ask the questions, how you phrase the introduction and how they say thank you. There is no magic answer to this, use common sense and if there is a difference of opinion, test out some options during

your short pilot. The really key point is that everyone does it the same way.
As I have been mentioning, I propose that you work with your in-house staff. There is another completely different way of doing the questionnaires which does not involve paying anyone – work in collaboration with another similar organisation. You visit their organisation and actually ask their questionnaire and they do the same for you.

There are two advantages of this:

1. Having an arrangement and pre-agree timeslots and procedures with another organisation will make the whole thing more structured and you are far less likely to get sidetracked.

2. It will avoid the Halo affect. This is the problem of people trying to be nice. (rather a British problem). You have all experienced the helpful waiter who asks if everything is ok and you answer ‚oh yes, just fine' while moments earlier you had been telling your friend how over cooked the food was and bad the service. We don't like telling people that they are doing a bad job. So if you can start your questionnaire by saying, I do not work for this organisation and so please feel free to say what you really think' you should get far more truthful answers. It certainly works for me as an external consultant.

Step 6: decide how many visitors to ask
Well the short answer is as many as possible. The larger your survey size, the higher a percentage of your total visitors who get a say. The only way you could be totally confident that you knew exactly what all your visitors thought, would be to ask all of them – this is obviously impossible.
However being overwhelmed by needing a large sample has been the downfall of many a project and we want this to succeed. So I will say 100 as a starting point. Be aware that this is a very small sample, but if you start small, you can always do another larger survey later on. This does have implications for how much you can trust the findings. If you have 10,000 visitors to your gallery each year and only gather the views of 100 – you only know what 1% of your audience actually thought. Obviously this weakens your case when presenting your findings to the rest of the organisation!

Margin for error
Many statisticians have spent a long time chewing over this problem – how confident can you be that your sample represents what everyone thinks. Fortunately for us they have come up with an answer. You give a margin for error figure which basically says 'this figure is what we found, and if you were to ask all our visitors the final answer might be this much higher or this much lower'.

So …
If you ask 100 people how they travelled to your venue and 30 of them said 'by car' you might say 30% of our audience travel by car. However you only asked 100 out of 10,000. Therefore to be more robust with your answer you apply an appropriate margin for error.

The ready reckoner below says that for a
sample size of 100 and a finding of 30% you need to apply a 9.0 margin for error, you could be 9% out either way. If you actually went out and asked all 10,000 visitors your answer may be anywhere between 21% and 39%. Which is still useful.

You write it down like this: 30% +/- 9.0%

30% give or take (+ or -) 9.0%

Ready Reckoner - margins for sampling error

Size of sample

		100	250	500	1,000	1,500	2,000
	5%	4.3	2.7	1.9	1.4	1.1	1.0
	10%	5.9	3.7	2.6	1.9	1.5	1.3
	15%	7.0	4.4	3.1	2.2	1.8	1.6
	20%	7.8	5.0	3.5	2.5	2.0	1.8
	25%	8.5	5.4	3.8	2.7	2.2	1.9
	30%	9.0	5.7	4.0	2.8	2.3	2.0
	35%	9.3	5.9	4.2	3.0	2.4	2.1
	40%	9.6	6.1	4.3	3.0	2.5	2.1
	45%	9.8	6.2	4.4	3.1	2.5	2.2
FINDING	50%	9.8	6.2	4.4	3.1	2.5	2.2
	55%	9.8	6.2	4.4	3.1	2.5	2.2
	60%	9.6	6.1	4.3	3.0	2.5	2.1
	65%	9.3	5.9	4.2	3.0	2.4	2.1
	70%	9.0	5.7	4.0	2.8	2.3	2.0
	75%	8.5	5.4	3.8	2.7	2.2	1.9
	80%	7.8	5.0	3.5	2.5	2.0	1.8
	85%	7.0	4.4	3.1	2.2	1.8	1.6
	90%	5.9	3.7	2.6	1.9	1.5	1.3
	95%	4.3	2.7	1.9	1.4	1.1	1.0

All of this doesn't mean you should not go ahead with a small manageable sample, it just means be aware of just how much you do know – and how much you don't. Acknowledging this will make your findings carry much more weight and it means you have answers for those awkward questions.

My final note on sample size is to plan for gathering at least 10% more questionnaires than your target. Just to allow for some to be incomplete (someone may have had to leave halfway through) or really illegible answers.

Step 7: decide on the best date and time to get a good sample

It is very easy to get bogged down in worry about whether half term is a good or bad time, if weekends or weekdays are better. Basically there is no magic answer. You do not have the resources to ask everyone all the time, so make some clear thought through decisions and make those decisions clear to anyone looking at the results.
So if a lot of your burning issues relate to how families use your facilities, consider a time when families will be present.

Perhaps that means doing the survey on three weekends, one of which is half-term.

You might plan it something like this:
The aim is to do ten questionnaires in each one person session, this might take 90 mins each session and to gather a total of 120 questionnaires as people are leaving the building

(timings are later in the day, to allow for people to go round and be on their way out).

	12:00pm – 1:30pm	1:00pm – 2:30pm	2:00pm – 3:30pm	3:00pm – 5:30pm
Weekend 1	Saturday	Sunday	Saturday	Sunday
Weekend 2	Sunday	Saturday	Sunday	Saturday
Weekend 3	Saturday	Sunday	Saturday	Sunday

As I mention above, you will need to be ruthless and limit the scope of what you are trying to achieve, otherwise you end up with a meaningless compromise. It essential however, that you make the bias in the timings and other criteria part of the write up you send round to everyone.

How do I make sense of it all?

Step 8: explore what your findings are telling you
The first issue is turning the pile of questionnaires into some results. I would strongly suggest you turn to the person in your project team who is best with excel (bear this in mind when choosing your team members in the first place) and ask them to set the titles up and enter the details of each form.

Check through the pile and discard any that have more than a few gaps – this is why you collected more than the actual number you were aiming for.

You will find that closed questions really pay off here because you can simply set up all the possible answers in a basic spreadsheet enabling you to type them up quite quickly.

With open questions, one of the best ways is to flick through the pile and group the answers together (with some very unusual responses perhaps kept to one side) and enter these group titles. It is better if only one or two people code up these open questions, so that you get consistent results.

There are two strands of analysis that you should consider exploring:
1. Simple adding up and averaging [link to the terms on averaging in the A-Z search facility] the answers to each question (which, because you thought about your questions carefully in the first place, will be useful in their own right)
2. What trends and combinations of answers seem to go together. With only 100 responses it will be possible to use the excel SORT facility to keep re-ordering the answers, so you can see if certain patterns appear. For example does what they were expecting to get out of the visit tie in with how far in advance they planned their trip? Does the fact that they brought children with them make them more likely to think the object labels were too complicated?

Oh, create lots of pie charts and graphs – it makes the numbers you are looking at make so much more sense. I often have to try putting some data into lots of different sorts of pictures before the underlying message becomes clear to me.

You should have your original burning questions to hand. Look at the simple adding up and averaging results, this probably tells you some things, and also raises other questions. So use the second technique to see if you can find a few patterns in the answers.

Step 9: discuss whether this is what you expected and check your trigger points
This is the point to bring back in the original estimated answers and the actions written against them. Did you find the answers you were expecting? Look at the other related answers and see if this starts to explain things.

Then consider if you have reached any of the trigger points written against your estimated answers. There may be some clear calls to action.

Remember that your first survey of 100 visitors is not going to completely unlock the mind of all your visitors. You may need to suggest delving much deeper into what more of your visitors think because you have findings which fly in the face of some of the underlying truths of your organisation. But remember everyone signed up to you doing this and if you take the margin for error into consideration, you have robust findings.

How do I make anyone else in my organisation interested in the results?
I wrote much earlier about the critical importance of getting other people from throughout your organisation involved from the start. This is the point when this really starts paying off. Because they have a stake in the survey and thought about it, they will be curious to see the findings.

Step 10: report, compare and make recommendations
I think one of critical things is to keep your presentations and written reports as short and to the point as possible. Most people don't like reading long reports just as much as other people hate writing them. One of the most powerful research reports I ever read was four pages long and that was following a survey of 1,000 people and some weeks of analysis.

You may like to consider keeping two quite different forms of record of your work:
1. A folder with samples of the questionnaire, brief write ups of the key points from you project team meetings, full research findings, notes about what worked well etc. This is a lessons learnt folder to pull out when you start your next research and also the place you go to dig out the actual results if you wish to probe them deeper.
2. A really snappy summary report with notes to briefly explain what you were trying to achieve in the first place, how you went about your research and critically a comparison of the original estimated answers with the actual ones. You are drawing conclusions and making recommendations. This is a call to action.

Finally I would like to raise again a point I mentioned earlier in relation to working with another organisation to staff each other's questionnaires. If you also make sure that some of your questions are comparable you can compare results. You can start to see you your findings are different not only from what you expect, but from what others expected and what others found. This brings a whole new dimension to a simple survey. [link to the benchmarking resource].

And it just keeps on getting more exciting!

References:

1. *Visitor information made easy* – Arts Victoria
2. *An A-Z of commonly used terms and protocols relating to box office and audience data*, Stephen Cashman 2005, ADUK
3. *A general introduction to the design of questionnaires for survey research*, Dr Thomas Burgess, 2001, University of Leeds
4. Ready Reckoner – margins for sampling error
The table shows the percentage to add or subtract from a finding to infer the likely case for the overall population in question from the sample sizes shown. Idea for ready reckoner drawn from Hill, O'Sullivan and O'Sullivan [1995] *Creative Arts Marketing*
The actual chart calculated by Stephen Cashman for *An A-Z of commonly used terms and protocols relating to box office and audience data*.