

CHOOSING THE EMPIRICAL RESEARCH DESIGN

Research Reality Scenario

Which Design to Choose?

The members of the senior management team of the Travel Delight tour operating company are having their weekly team meeting to discuss how to proceed with a possible major investment in new information and communications technology. John Deeside, the Managing Director of the company, is a very intelligent and experienced man who did not go to university when he was young. In his hand-picked team are Patrick Hampshire, the Finance Director, who has a PhD in physics; Shirley Rutland, the Human Resources Director, who has a MA in anthropology; Dominic Cornwall, the Marketing Director, who has a BA in business studies; Carla Sussex, the Operations Director, who has a BA in tourism management; Bill Somerset, the IT Director, who has a PhD in information systems; and Sophia Kent, the Public Relations and Communications Director, who has an MSc in psychology.

'Okay,' said John, starting the meeting, 'this is a big project and one we can't afford to get wrong because it could either make or break the business. So, we all feel that updating our IT and communications system is a good idea, but we don't know if it will work in the way we expect or deliver the improvements we want. At this stage we are really guessing and hoping, but that's not good enough to commit \$20 million to! I, and the Board, need some hard evidence before we can consider going ahead. That's where you guys come in. Let me hear your ideas and I'll see if I'm convinced.'

Patrick makes the first contribution: 'Well, if we really want to have some hard and credible evidence, we need to set up a controlled experiment to test our hypotheses and establish the cause–effect relationships and mechanisms.'

'Yes, I agree in principle,' Sophia chipped in, 'but we're not in a situation where we can set up a controlled laboratory experiment – it would be too expensive,

time-consuming and difficult to implement and, anyway, it might also be too unrealistic in terms of the real context we're dealing with. So, what I would suggest is that we set up a programme of interviews with employee and customer groups to discuss and get their feedback on what we are planning. That would enable us to capture the perceptions and concerns of the key players and take these into account when designing and implementing the new system.'

'Possibly, but, on the other hand, what we could do', Dominic suggested, 'is put together a questionnaire survey so that we could ask a representative sample of the employees and our customers what their views, concerns and priorities are in relation to this type of technology. That would give us data on, and an insight into, what the key issues might be.'

'Interesting, if different, views so far,' said Patrick. 'What do the rest of you think?' Shirley ventured, 'One way to get a real insight into how people are going to react to changes in technology and the way things work would be to go into the situation(s) these are going to impact and observe how the employees and customers currently interact with how we are doing things now. This would give us an idea about how they perceive the current situation, how relationships work now and what are seen to be the norms.'

'That would be useful,' Carla added, 'but it wouldn't tell us how the employees and customers might react to the changes we are planning. So, what I would suggest – perhaps in addition to what Shirley has proposed – would be an approach that would enable us to get an understanding of the current situation, introduce changes in technology in one or two areas of the business and then evaluate the effects and impact of those with a view to rolling the technology out across the company later when we've learnt what the issues and problems might be.'

Finally, Bill got the chance to have his say: 'This sort of change is never easy, is it, but, so far, we seem to be concentrating on the users and interfaces. As important as these are, they really are secondary to the architectural and technical aspects of the system. If we don't get these aspects right, it won't work anyway. So, I suggest we concentrate on modelling and trialling the system in miniature to begin with to make sure that it's set up right and works well, then we can consider some of these other ideas.'

'Wow,' exclaimed Patrick, 'I knew this was not going to be easy, but you guys have really given me some things to mull over. What has come out of this is that we need to give this some considerable thought over the coming weeks before we make any decisions on how to proceed. Perhaps we could start by formulating and agreeing what our aims and objectives are for introducing the changes, as this will enable us to specify what information we need to achieve these and then that might give us a clue about what may be an appropriate way to gather the information we need to make a final decision.'

Key Decisions



Choosing Experimentation?

Whether you should choose experimentation as the method for your research will depend on whether it is the most desirable and feasible way in which to answer your research questions and hypotheses. Of course, this raises another question – how do I decide whether it is the most appropriate and feasible way or not?

This is not an easy question to answer in a few words, but, if your research is going to adopt an inductive approach or is exploratory in scope, is not being conducted to establish cause–effect relationships, requires data to be collected from a wide variety (particularly in geographical terms) of people or organisations, or is concerned with phenomena that are not easy to simulate and control, then it is likely that an experimental design will not be the most desirable or, indeed, feasible method for your purposes.

On the other hand, if your project does demand that the cause–effect relationships and mechanisms be explored or it is conducted in a limited and controllable environment or is concerned with testing or trialling new principles, practices or products, then use of an experimental design may be appropriate.

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And, if experimental design is the choice for you, it may be helpful to visit the Companion Website (study.sagepub.com/brotherton) where you will find a video dealing with experimental and quasi-experimental designs and a link to more extensive and detailed assistance for using experimental designs in the Video and Web Link sections respectively.

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To see how these considerations play out in practice, access the video material via the link on the Companion Website (study.sagepub.com/brotherton) dealing with the question of whether to use a survey or not and, if so, how to ensure that it is designed appropriately and/or see the surveysystem.com link in the Web Links section, which will lead you to material dealing with the same issues.

Technique Tip



There are various tactics outlined below that you can use to try to achieve a better response rate, but none is foolproof.

- \checkmark Make the questionnaire as easy and quick to complete as possible.
- ✓ Ensure that a date for completion and return is clearly communicated to the respondents.
- ✓ Include a 'selling' message with, or in, the questionnaire to motivate the receiver to complete and return it.
- ✓ Offer some form of inducement the respondent might value, such as a copy of the results.
- ✓ Provide a reply-paid envelope to eliminate there being a cost involved in returning the questionnaire.

Research in Action



The Nature of Hospitality

This research study (see Brotherton, 2005) was essentially a comparative case study, within which two independent samples of hotel guests from two different four-star hotels in close proximity to one another were surveyed. Having negotiated access with the respective general managers, guests in each hotel were interviewed by two interviewers who both used the same questionnaire to conduct the interviews. Prior briefings were given by myself to each interviewer to stress the need for consistency in conducting each interview and the importance of following the instructions contained in the questionnaire in order to ensure, as far as was reasonably possible, the absence of potentially contaminating prompting or help for some respondents but not others. Some examples of these 'embedded' instructions are provided below.

Section One

Ask the following questions exactly as they are. **DO NOT** provide any explanations or further clarification.

Question 5

a) If I asked you to describe the *Physical Aspects* of hospitality in this hotel as a **season of the year**, which one would you choose?

Interviewer Note – Only allow the respondent to choose one of the seasons.

Autumn q

Winter q Spring q Summer a

Obtaining Some Personal Details

Thank the interviewee as indicated below and ask the final questions relating to his/her personal characteristics. Don't ask Question 6, just complete this yourself – it should be self-evident! Be sensible here with the 'age groups' question (Question 11). If the interviewee is obviously young or old do not go through all the age groups. If you are unsure start with the one you feel might be closest to the one that the person is likely to fit into. Similarly, be sensible with Question 10. If the respondent's appearance obviously fits one of the categories just record this and don't ask the question.

Note: Question 6 concerned gender (male/female). Question 10 was concerned with the respondent's ethnic origin.



In addition, the University of Haifa link in the Web Links section of the Companion Website (study.sagepub.com/brotherton) is a site that contains a quite extensive collection of material relating to comparative research methodology.



	Single Cases	Multiple Cases
Holistic	TYPE 1	TYPE 3
Embedded	TYPE 2	TYPE 4

Single Cases Multiple Cases

FIGURE 6.1 Alternative design options for case studies (Yin, 2013: 39. Reproduced with permission of Sage)

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A very good introduction to using netnography for research is the text produced by Kozinets (2009), and the 'Netnography – The Movie' link on the Companion Website (study.sagepub.com/brotherton) will take you to what I think is a really cool video, produced by a student, that explains the different stages of netnography in a clear but very entertaining manner.



Note: Recording Skype call material without the knowledge, consent or permission of the other participants would certainly be unethical and quite possibly illegal as well. The ethical principles of informed consent and no harm equally apply here.

Evaer – This enables you to capture original Skype video and audio data and to record it in high quality. It supports the recording of single Skype video calls,

Skype screen sharing sessions and up to ten-way Skype group video calls. Skype video calls can be recorded directly to hard disk with side-by-side, separate files, audio-only, local-webcam-only and remote-webcam-only modes. There are also options to record Skype video calls as MP4 or AVI and to record separate MP3 audio files with video calls.

http://evaer.com

Other Recorder Products

Vodburner – www.vodburner.com

Pamela - http://www.pamela.biz/en/

SuperTintin – www.supertintin.com



For the views of one of the most authoritative proponents of mixed-method approaches, John Cresswell, on what mixed-methods research is, see the link in the Video Links section of the Companion Website (study.sagepub.com/brotherton).