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| Griffith university |
| **Using photo elicitation to understand customer experiences – Some lessons learned** |
| Session - Innovations in Automated Data Collection |
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**Abstract**

This paper considers one method used to capture a customer's *in situ*, subjective, meaningful experience. Photo elicitation is one method that overcomes the recall bias of more traditional post-hoc measures whilst not being overly intrusive within the experience. Here we review lessons learned from implementing photo elicitation at three community events. These lessons covered platforms (devices) used to collect data, participant training, ethical considerations, the participant experience, and data analysis. Briefly, smartphone cameras were found to be most effective and efficient, participant training should both allow for flexibility in the data collection, but overcome technical and ethical issues, whilst the latter could be managed with planning and foresight. Feedback from the participants suggested that they enjoyed the data collection method, and that it was not intrusive, and finally, rich qualitative data, with some unexpected results, were collected and analysed using this technique. Photo elicitation can therefore provide good, management-relevant insights, whilst providing an enjoyable research experience for participants and deepening our conceptual understanding of the lived service experience.

**Introduction**

Photo elicitation is a visual, qualitative research technique incorporating the use of photographic images into interviews ([Harper 2002](#_ENREF_4)). The advantages of introducing photographs into the interview setting to trigger memories and facilitate recall have been well documented in many studies (e.g., [Harper 2002](#_ENREF_4), [Garrod 2007](#_ENREF_2), [Pink 2013](#_ENREF_9)). In addition, [Matteucci (2013](#_ENREF_7)) suggests that photo elicitation is a creative and multi-sensory approach, engaging for participants and thereby reducing survey fatigue common with other techniques. Other studies (e.g., [Harper 2002](#_ENREF_4), [Pullman and Robson 2007](#_ENREF_11), [Scarles 2009](#_ENREF_12)) also illustrate that photo elicitation method can help to trigger respondents’ memories related to specific places and events, sharpen their abilities to reflect on their experiences, and elicit stronger, more comprehensive responses when explaining their experiences behind the pictures. Importantly, [Pullman and Robson (2007](#_ENREF_11)) argue that a photo elicitation method can be particularly suitable when investigating customer experience as the customer can use a camera to record moments that impact them and these can be discussed at a later time with the researcher.

Useful, and user-friendly, innovative techniques that allow researchers to study the customer experience are becoming increasingly important as we move towards an experience economy. From a business perspective, customer experience has become of increasing interest to service providers as part of product development and can be based on interactions with places, firms, communities, attractions, service personnel or other customers (Gentile, 2007). Our study broadly adopts a phenomenological approach to understanding the customer’s experience. The choice of photo elicitation enables a researcher to gain deeper insight into the subjective, event specific experiences as socially constructed by the participant. While many researchers (e.g., [Pine and Gilmore 1998](#_ENREF_8), [Gentile, Spiller et al. 2007](#_ENREF_3), [Verhoef, Lemon et al. 2009](#_ENREF_16)) have started to investigate customer experience, there is still a dearth of research that uses *in situ* methods to obtain a better understanding of the momentary occurrences that add to an individual’s experience. Many existing techniques rely on post event reflection, with associated memory and recall issues (e.g., [Hosany and Witham 2009](#_ENREF_6), [Hosany and Gilbert 2010](#_ENREF_5)). Photo elicitation on the other hand, allows moments to be captured *in situ*, preferably within the flow of the experience, to be elaborated upon post-event. Thus, conversations between researcher and respondent about the photos that were taken *in situ* may bring new insight and more meaningful knowledge about customer experience. This paper specifically applies photo elicitation to the investigation of more micro and momentary level customer experience with the objective of evaluating the logistics of the method.

**Key decisions associated with using photo elicitation**

Like any research method, the use of photo elicitation requires careful consideration of a number research decisions. These decisions are mainly concerned with the data collection platform (devices), the training of participants, and ethical considerations. Careful consideration of these issues prior to commencing data collection is necessary to ensure an adequate sample size of photos, the quality and usability of the images, participant commitment, and prevent any sensitivities arising over the use of images in a research context. Some of these considerations are presented here.

The access to a device (single use camera, digital camera, smartphone, tablet) is required as part of the equipment for photo elicitation. Traditionally photo studies of this type have relied on single use camera or digital cameras (e.g., Pullman & Robson, 2007; Van House, 2011). The usage of single use camera raises the consideration for obtaining the photos from participants. As pointed out by Pullman and Robson (2007), making duplicate prints for follow-up interviews and mailing them to participants is time-consuming and costly. Participants’ ability to take reasonable photographs is also a requirement for this type of research. Although aesthetically beautiful photos are not required for photo elicitation, photos that are clear, in focus, and reasonably well exposed are desirable. Some issues with single use camera may include respondents’ unfamiliarity with the flash function and higher possibility of poor quality pictures, as reported by Pullman and Robson (2007). However, recent technological advances have meant that smartphones are equipped with cameras that are of good quality and easy to use. Importantly, the high adoption rate of smartphones means that, it has become easier for people to potentially participate in a photo elicitation study using their own device.

Another important decision for photo elicitation studies is the extent of instructions given to participants ([e.g., Scarles 2011](#_ENREF_13)). Photo elicitation studies provide opportunities for participants to produce their own images, and this can be influenced by specific requests from researchers (i.e., number of photographs, content of photographs, photographing within a particular timeframe, etc.). Therefore, researchers have to decide how detailed and/or structured the requests should be as suggested by [Scarles (2011](#_ENREF_13)). [Tinkler (2013](#_ENREF_14)) provides a summary of the options, which include: (1) a very open and unstructured approach (go and play with the camera); (2) a more controlled approach such as use the camera to capture any image associated with some topic; or (3) a more carefully scripted approach where the task is clearly specified and asks participants to take photos of things associated with answering a specific research question (just photograph consumer goods you particularly want to buy next month). The choice of approach will largely depend on the research question to be answered and the researcher’s philosophical approach. For research into time bound activities, such as a specific event (eg, a festival) a decision needs to be made about the timing of when photo recording starts and finishes. For example, is it on the day of the event or when present at the event.

Ethical requirements for this type of study are also worthy of consideration (e.g., [Epstein, Stevens et al. 2008](#_ENREF_1), [Prosser, Clark et al. 2008](#_ENREF_10)). Photo elicitation studies that ask the participant to take photos as recordings of their experiences may be subject to certain sensitivities. Tinkler (2013) highlights three key areas for ethical consideration: taking the photos; discussing (elicitation) the photos; and presenting the photos. First, taking photographs in public spaces raises the issue of the privacy of other people. One way to deal with this is to seek the permission of people included in the photo. This is feasible in some situations but may be more complex in public outdoor settings where people can be in the background of a photo. As our research was conducted at public events, consideration was given to the ethics of participants taking photos and it was resolved to brief participants on the need to seek permission when directly photographing people at the event. In addition, where people were in the background it was agreed that their identities could be hidden through the use of pixilation of faces. Conducting research at public or private events may also require permission from the event organiser. A second set of ethical consideration may be associated with the elicitation phase as participants are asked to recall experiences associated with the photos. For our research this was not deemed to be overly sensitive as the context for the study was a pleasant food and wine event. Informed consent and some reassurance of anonymity may still be required. The use of pseudonyms in the reporting of findings can assist in maintain some degree of privacy. Finally, the presentation of images at conferences or in reports can raise ethical considerations. The issue of who owns the photo is raised and it may be necessary to obtain a copyright release from participants. Options include requesting permission to reproduce any photos or to ask the participant for copyright release on specific images.

Finally, the nature of a photo elicitation study normally ends up with a small sample size ([e.g., Pullman and Robson 2007](#_ENREF_11)). This is due to several reasons including the significant time required by participants to engage in the photographing of everyday life of specific experiences, the logistics of recruiting and briefing people for the study, and the desire to conduct follow-up interviews. Furthermore, the outcome that people will produce several photos means that the data analysis can be quite time consuming. For instance 20 respondents can easily generate in excess of 200 images to be analysed. The data from graphic sources are unclassified and require some type of content analysis, such as assigning the images into categories or themes, which is similar to what is done with verbal data drawn from open-ended questions, in-depth interviews or focus groups ([for example, see Pullman and Robson 2007](#_ENREF_11)). Not surprisingly, a larger sample size for this type of study would require a huge amount of time investment from researchers to do the coding of images, unless some sort of automated approach could be applied. Similarly, using the photos as an elicitation technique in follow up interviews will also make it difficult to employ large samples.

The present study makes an initial attempt to investigate *in situ* customer experiences at the more micro and momentary levels by utilizing images produced by participants at the events. Drawing on the results of three field studies using participant-produced photo elicitation in three community events, this study also explores several methodological issues with a focus on the logistics of data collection, since few studies have employed the participant-produced images to investigate customer’s momentary experiences. Other lessons learned from these field studies, such as ethical requirements, survey design and organizing briefing/training for participants before the event are also discussed and reported in the subsequent sections. The event context used included tourism oriented food, wine, music community events. The field studies involved participant generated photos, answering a survey about the photos and undertaking an elicitation interview.

**Field studies**

To assist in refining the procedures of a participant-produced photo elicitation study, three field studies were conducted at three separate community-based events. All the events were held in Gold Coast, Australia, and were specifically chosen with particular reference to the sensory experiences of sight, sound, smell, taste, and touch during the event. In each event, participants could be exposed to a series of activities that would shape their experience, but which also occurring within a confined space/time to provide some structure for the comparative part of the data analysis.

Three groups of participants were recruited to attend three separate events and record their experiences by taking photos. In order to get a better understanding of the research devices (single use camera vs. smartphone camera), the first study assigned ten participants with single use cameras. The second study randomly assigned ten participants to using a single use camera or a smartphone (five participants used single use camera and the other five used smartphone camera). In the third study, participants were assigned to use a smartphone (N=9). In the first and second studies, a 24-exposure single-use camera with built-in flash was provided to the participants.

A briefing session was provided for each participant before he/she attended the event. During the briefing session, an Information Sheet and Consent Form were also provided. The Information Sheet elaborated the task that participants were asked to undertake, in particular, take photos of anything that they felt contributed to their experience (good or bad) at the event. The Consent Form clearly informed participants that their involvement in the study was totally voluntary, and withdrawal from the study at any time without explanation and penalty was an option.

After attending the event, the single use camera group mailed back their camera to the researcher, who arranged development on the pictures. All photos that were clear were scanned into computer and sent back to the participant by email. The participant then nominated the ten most important photos that would be used in the next stage of the research. For the smartphone group, participants were asked to send back ten pictures, which best represented their experiences at the events, to the research team. Both groups thereby provided 10 digital photos for use in the recall stage of the study.

Then the research team incorporated the ten pictures into Qualtrics, an online survey tool. Using the survey tool, participants answered a series of questions about the photo experiences as part of an exploration of their feelings and thoughts of the community events. Each photo image was incorporated into the survey tool and was followed by an open-ended question asking the participant to reflect what motivated him/her to take the picture. The open ended question was followed by two multiple choice questions, asking the participant to rate his/her feelings when taking the picture and evaluating what elements contributed to his/her feelings about the moment captured in the picture. The survey also collected general satisfaction evaluations and consumer behavioural intentions, as well as several demographic questions, including gender, age, education level, and occupation. In the last part of the survey, participants were asked to indicate their willingness to participate in a follow-up one-on-one interview. Several participants were then interviewed to gain further in depth understanding of the photos and what types of customer experiences these represented. Interviews lasted approximately 30-40 minutes and each photo was discussed.

**Findings**

Although this paper focuses predominantly on the lessons learnt from the pilot study, some summary results of the second field study are included here to illustrate the types of findings achieved from the photo elicitation. In total, one hundred pictures have been collected from ten participants after attending a food and music community event. First, the photos were coded for the main content of what was presented in the image, next each participant’s set of photos and survey and interview responses were compiled into an individual profile analysis and finally, a comparison between participants’ experiences was undertaken.

All the pictures were first classified into the following 7 categories (see Table 1): event programs, ambiance/facilities (eg, signage, poster, emergency tents), fellow customers (people not known to the customer), friends/family, natural backdrops (eg, beach, surfers, seagulls), food & beverage, and customer service (eg, volunteers, vendors, policemen). Not surprisingly, 26 of them were related to the event programs, followed by ambiance/facilities (eg, signage, poster, emergency tents) and fellow customers (people not known to the customer) with 17 and 14 out of the total 100 pictures respectively.

Table 1 Content Analysis of Images

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| Category | Number |
| Event Programs | 26 |
| Ambiance/Facilities (eg, signage, poster, emergency tents) | 17 |
| Fellow customers (people not known to the customer) | 14 |
| Friends/Family | 13 |
| Natural backdrops (eg, beach, surfers, seagulls) | 12 |
| Food & Beverage | 12 |
| Customer service (eg, volunteers, vendors, policeman) | 6 |

Next, each participant’s set of photos and survey and interview responses were compiled into an individual profile analysis. To illustrate what is profile analysis, here was an example of one participant’s profile analysis. For the privacy issue, this participant was assigned a pseudonym name “Laura”. Laura is 26-35 female, who had a graduate or higher level of education. Laura was predominantly interested in photographing vendors at the event, followed by food and wine she had at the event and her friends’ company during the event. When rating her feelings about the ten pictures, Laura rated her happiness consistently high for all ten images.

From her follow-up interview, Laura indicated that she was really impressed with the food, wine, customer service and friend’s company. Some quotes have been included as follows:

“*My most memorable moment at the event was having the fish with my friends and listening to the symphony, because I was enjoying my favourite three things at the same time: food, music and company.”*

“*I was very impressed with my wine purchasing experiences. […] The bartenders were so helpful, […]. We really enjoyed this service, and also learnt some new knowledge about the Australia wine. At the end, we bought more than one glass of wine because we had such a great time!”*

In summary, people’s experiences are not confined to those orchestrated by the event organisers but also included a wide range of associated experiences. These associated experiences included things like nature (beach scenes, surf scenes, trees, etc.). From the pictures, it is obvious that a lot of people do appreciate the natural beauty of the event backdrops. They also appreciate some of the unique event characteristics, in this case, a special tourist bus provided by the organisers. Participants also expressed strong interest in seeing arts and performances around their residential community.

**Lessons learnt from field studies**

There were several lessons or insights learnt as a result of the photo elicitation study. These can be grouped into logistics lessons and analysis lessons.

**Logistic lessons**

**Device:** Based on the three studies, smartphone camera data collection was found to be superior to single use camera in several respects. Many participants were not familiar with the flash function on the single use cameras, resulting in a high percentage of poor, unusable images. There is a need, therefore, for appropriate training in single use camera use to obtain usable image. In particular, single use camera has limited number of exposures, only 24 exposures in total. Furthermore, participants were not allowed to take as many pictures as they wanted, constraining the data collection process. After the event, researchers had to collect back all the single use cameras and send them to the photo shop to develop the films. Later, researchers had to scan all the developed pictures into computer and email them to participants so that participants could select the ten pictures best representing their event experiences, which would be incorporated into the Qualtrics recall survey by researchers. The whole process was time-consuming and costly. On the other hand, for the participants using a smartphone it was relatively easy to take as many pictures as they wanted, and check the quality of pictures all the time. If they were not satisfied with one picture, they could always re-take as many as they wanted until they felt satisfied. After the event, smartphone users could easily share the ten pictures to the research team through their favourite way, such as emails, MMS, or any mobile message apps like Whatsapp, Wechat or FB messenger, which can save a lot of time and money.

**Ethics:** In line with the ethical guidelines of the researchers’ university, ethical clearance was obtained subject to addressing privacy concerns. A key ethical issue of this type of photo elicitation study is that participants are going to take photos in public places, especially with regard to the privacy of other people attending the event. In accordance with the university’s ethical guidelines, approval was sought from the event organizer, confirming their support for the study participants to take photos at the event. Meanwhile, in the briefing session, participants were also told to respect other people and exhibitors and seek permission before photographing exhibitors, products or booths at the event: more specifically the following information was included *“Please respect other people and exhibitors at the event. Seek permission to photograph exhibitors, products or booth”.* The participants or the organiser expressed no ethical concerns during the study period. This positive outcome was due to the attention given to minimising ethical concerns in the design of the study, the liaising with event organisers, and briefing of the participants prior to taking the photos.

**Presentation of photos:** As some of the photographic materials may be included in the thesis, publications or conference presentation, participants were asked to sign a release form of the photographs they are willing to allow to be published according to the researchers’ university ethical requirement. Therefore, we added two options regarding the usage of the photographic materials in the thesis, publications or conference presentations: (1) the participant was given an option to agree (or not) to allow the researcher to use the photos for research purposes (thesis publication, journal papers, and conference presentations) with any identifying information pixelated out; or (2) for more specific photo image use with faces included, we asked the participant to provide a signed release form that gives permission to use a photograph with identifying information (facial expressions). Thus, two options were included for obtaining consent to use specific photos depending on future use.

**Commitment of participants**: The photo elicitation study required a high level of commitment from the participants, which necessitated careful briefing of participants. Any instructions to respondents have to be clear to explain the research aims and objectives and what photographs respondents are required to take/share. The purpose of this project was to get a better understanding of customer experiences at the events, which could be anything important/unimportant to the customers, or anything eliciting customers’ positive/negative feelings. Therefore, the researchers only explained the context of the research, allowing the respondent to have significant freedom to determine the content of the images. It is more important that respondents know what the commitments are that they are making.

**Analysis lessons**

The method provides good insight to understanding customer experience from an individual viewpoint, in line with its phenomenological underpinnings. Customer experience is highly personal and what is meaningful is the co-creation an experience between the event offering and an individual. Photos represented very personal experiences as the foundation of value. Experiential value is gained not only from the program but also from the event backdrop, family, friends and service personnel. The combination of an online survey and direct interviewing provided deeper insight. Photo elicitation enhanced participant experiences by helping them to reflect more deeply on the event experience. This technique stimulates deeper reflection, producing rich data, and it provides a good method to explore, in depth, the momentary experiences people have at an event by incorporating the photo, survey questions and the follow-up interview.

**Conclusion**

In conclusion, photo elicitation offers many advantages for researchers who wish to capture customers' *in situ*, lived experiences; the use of photos forms a bridge between the experience and its recall, and appears to be an enjoyable task for respondents. The rich qualitative data provided new insights into the importance of event settings, providing managerially useful information. However, our experiences also highlighted those important considerations that must be worked through prior to data collection, through a combination of pilot testing, liaising with stakeholders, participant training and consultation with ethics granting agents. We hope that our lessons presented here may assist other researchers involved with, or considering the use of, photo elicitation as a research method.

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