

## A Research Note on Facebook-based questionnaire survey for academic research in business studies

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### Abstract:

*The subject of online survey has been discussed in both the academic community and the business community, especially by survey tool vendors. This paper examines a specific type of online survey, i.e., Facebook-based questionnaire survey for academic research, based on the writer's recent experience in this form of research exercise. The findings from these exercises largely agree with the evaluation viewpoints from the academic community in general. Nevertheless, this paper also points out that the contemporary technological platform and tools for conducting online survey via social network sites, such as Facebook are more user-friendly, more widely available and more powerful than ten years ago. The paper also serves to inform university students, mainly on business studies, who are interested in doing online survey research on how to do so, especially as an agile research approach. In this sense, this paper has pedagogical value, other than academic value.*

**Key words:** Facebook, Online questionnaire survey, Academic research, Agile research approach

### Introduction

Conducting academic research, especially by students in universities, has always been a challenge – it can be time-consuming, intellectually testing and communication-intensive,

among others. In this paper, the writer examines Facebook-based questionnaire survey as an agile approach for academic research. Agility implies leanness, flexibility and responsiveness in this case. Here, the aims are:

*Aim 1:* to review Facebook-based questionnaire survey as an agile academic research method, mainly for university students in business studies<sup>1</sup>.

*Aim 2:* to offer an account of how to conduct Facebook-based questionnaire survey based on the writer's recent experience with this kind of research approach.

The discussion, the writer believes, offers both academic and pedagogical values, especially to university students in business studies who are involved in doing dissertation projects with tight time-constraint.

## **Basic ideas behind questionnaire survey and online survey**

Questionnaire survey is a kind of survey research method, as survey research can also be conducted by structured interview and observation. For Bryman and Bell (2007), survey research "comprises a cross-sectional design in relation to which data are collected .... at single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables .... which are then examined to detect patterns or association." Gill *et al.* (2010) maintain that: "survey research occupies a variable, intermediate position somewhere between ethnography and experimental research", since some survey approaches are analytical/ explanatory in nature while others are more descriptive in orientation. Liu *et al.* (2012) recommend that diagrams of data structure be used to improve data collection and analysis in survey research. For research

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<sup>1</sup> The emphasis on business studies arises from the writer's main teaching experience on subjects in business studies. Most likely, the content here should be useful to students in social sciences.

design, survey research methods can be integrated with other research methods, such as case study research, when required, see Gable (1994). In terms of research methods evaluation criteria, survey research is likely to have good replicability, weak internal validity, strong external validity (with random-sampling methods) and weak ecological validity (Bryman and Bell, 2007). As to online surveys, they have been conducted for various purposes for a long time. Shropshire *et al.* (2009) summarize the online survey practices as follows: “Beginning in the late 1990s, the use of Web-based surveys rapidly increased... Today, they are ubiquitous, although they are often of questionable quality.” Some online surveys are for market research while others are for academic research, etc. Same as other research methods, online survey research should be sensitive to ethical concerns, such as privacy and confidentiality (Buchanan and Hvizdak, 2009). There are several general advantages and disadvantages, based on Wadia and Parkinson (2010) and the writer’s own experience:

### **Advantages**

*Advantage 1[to the researcher]:* Inexpensive to launch the online survey

*Advantage 2[to the researcher]:* Quick to finish the whole survey exercise with real-time compilation of survey statistics

*Advantage 3[to the respondents]:* Quick and convenient to respond to the survey

### **Disadvantages**

*Disadvantage 1[to the researcher and the respondents]:* Respondents need to regularly access and have access to the Internet.

*Disadvantage 2[to the researcher and the respondents]:* People with disabilities, e.g., visual impairment, have difficulty to participate in the survey.

In their discussion on online survey, Matsuo *et al* (2004) identify a number of methodological and data analysis issues related to sample representativeness, response bias, sample size requirement and difficulties of analysis on written comments. The concern of potential sampling bias with online survey has also been raised by Fleming and Bowden (2009). In the same vein, Andrews *et al* (2003) maintain that online surveys have “distinctive technological, demographic and response characteristics”. Matsuo *et al* (2004) suggest that online surveys are “the most cost effective means of data collection when the target population is students and employees on a college campus”. Our present main interest is on Facebook-based survey as an agile academic research approach, which is a specific form of online survey. This research approach is examined in the next section.

### **An overview on Facebook-based questionnaire survey**

According to Boyd and Ellison (2008), a social network site can be defined as “web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others with the system.” Facebook, a major social network site, first appeared in 2004 and became available to everyone in 2006 (Boyd and Ellison, 2008). The writer could add that Facebook is banned in the People’s Republic of China (PRC), but not in Hong Kong, which is a Special Administrative Region of PRC. At the present time, Facebook-based questionnaire survey, both for academic and non-academic purposes, is not a particularly new topic; it has been explained in quite a number of sources, e.g., Bullas (2013), Polldaddy.com (2014), Easypromos (2013), and QuestionPro (2014), Researchaccess (2014) and SurveybuilderPlus (2014). SurveybuilderPlus (2014) explains that there are a number of

ways to post survey url links: (i) in the Facebook advertisement, (ii) in a separate tab in a company's Facebook business/ fan page and (iii) in the page itself as an embedded link. EasyPromos (2013b) specify four benefits of conducting Facebook-surveys for commercial enterprises: (i) improve knowledge of your consumers' profile, (ii) generate leads, (iii) gain new fans, and (iv) offer a pleasant experience for your users via the survey. In this paper, the writer presents his own account of using Facebook-based survey for academic research in an agile mode. Thus, the benefits mentioned in EasyPromos (2013b) are not totally relevant to our discussion.

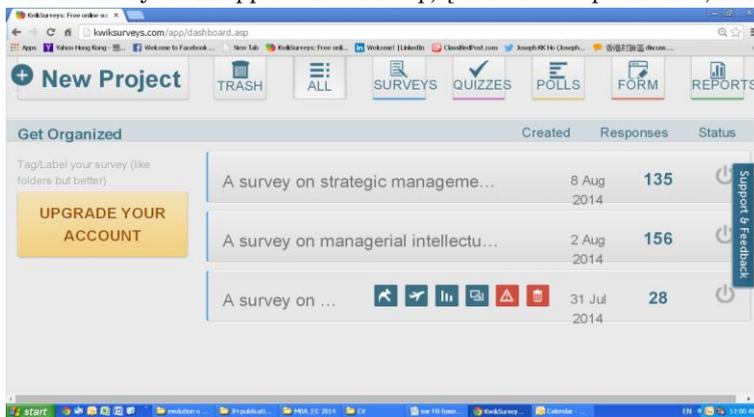
### **A personal experience on conducting Facebook-based questionnaire survey**

The writer has been making use of his Facebook platform to provide e-learning support to his students (Ho, 2013; 2014a) since 2009. At present, there are around 1,400 friends in the writer's Facebook. Over the last two months, three Facebook-based questionnaire surveys have been carried out by the writer. One of the Facebook-based survey exercises is reported in Ho (2014b). The three surveys were carried out with a free-of-charge online survey tool from KwikSurvey (2014)<sup>2</sup>. The three survey questionnaires constructed by the writer were all brief with around 16 multiple-choice questions so that they could be completed within 3 minutes by respondents. The first survey is on work-life balance, the second one on managerial intellectual learning and the last one on strategic management accounting, see also Exhibit 1.

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<sup>2</sup> Other *free-of-charge online survey tools* include SurveyMonkey, SuperSurvey, QuestionPro and eSurv. While employment of the basic functions of these tools are free-of-charge, premium support with more advanced survey software features are charged for their usage.

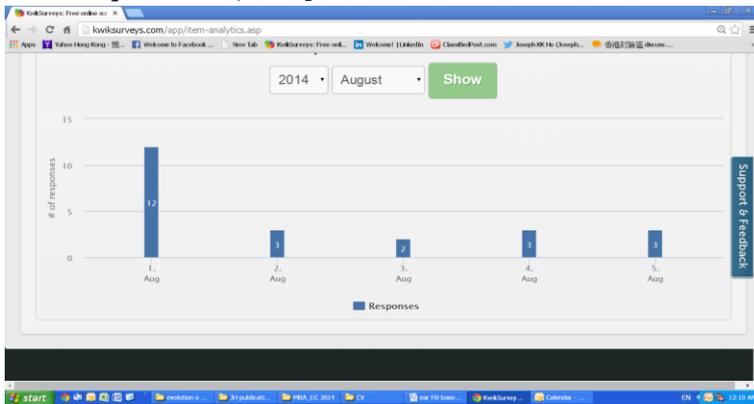
**Exhibit 1: three online survey projects as recorded in KwikSurvey** (<http://kwiksveys.com/app/dashboard.asp>) [visited at September 6, 2014]



From Exhibit 1, it is noted that the number of respondents for the first survey project (on work-life balance) is 28; for the second survey project (on managerial intellectual learning), the number is 156. As to the last one (on strategic management accounting), the number is 135.

With the Kwiks survey tool, after the creation of a survey questionnaire form, a url link was generated. The writer then posted the url link in his Facebook wall and invited his Facebook friends to participate in the survey with an invitation comment on Facebook. The survey link was also posted on the writer's Facebook groups on various management subjects, see Ho (2013) for further discussion of these subject groups. These then made up the basic steps for launching a Facebook-based questionnaire survey. For the first survey (on work-life balance), the response rate was quite poor. That remained the case despite repeated posting of the survey on the writer's Facebook wall. The poor response situation is clearly shown in the response chart from the online survey tool platform, as revealed in Exhibit 2.

**Exhibit 2: response statistics for the first survey (on work-life balance) [url address: <http://kwiksurveys.com/app/item-analytics.asp0> [visited at September 6, 2014].**



After reviewing the response rate on the first survey, the writer revised his survey launch strategy by sending out invitation messages to individual Facebook friends to participate in the subsequent two surveys. As a consequence, the response rates for these two surveys shot up on August 10, as shown in Exhibits 3a and 3b.

**Exhibit 3a. Response statistics for the second survey (on managerial intellectual learning) [url address: <http://kwiksurveys.com/app/item-analytics.asp0> [visited at September 6, 2014].**

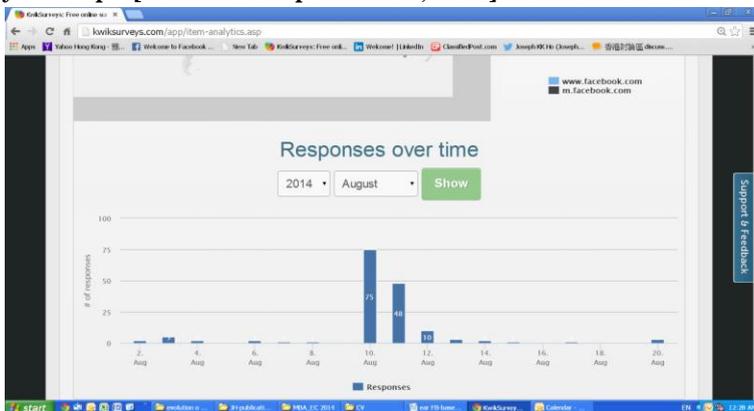
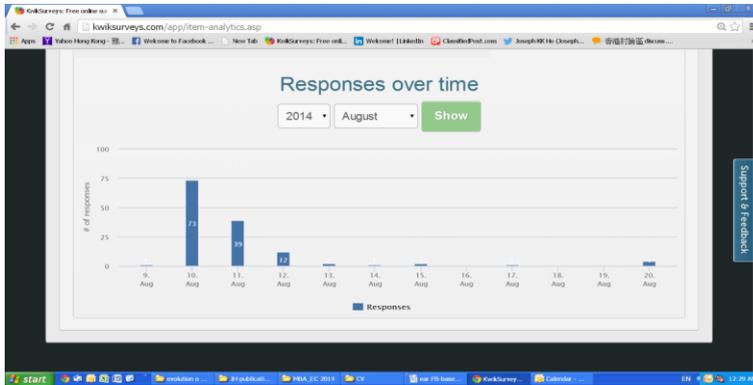


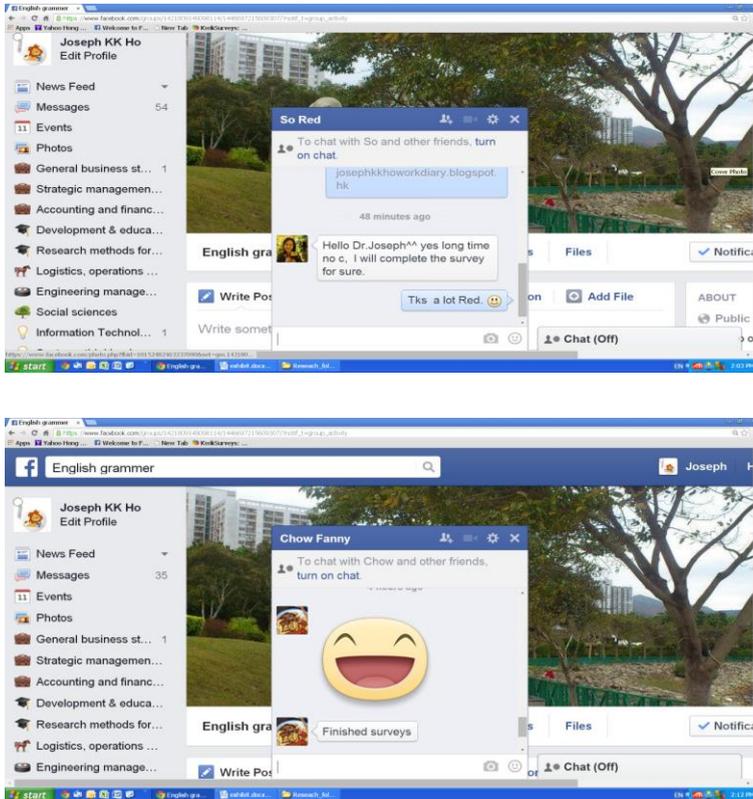
Exhibit 3b. response statistics for the third survey (on strategic management accounting) [url address: <http://kwiksurveys.com/app/item-analytics.asp0> [visited at September 6, 2014].



## An evaluation on Facebook-based questionnaire survey practices

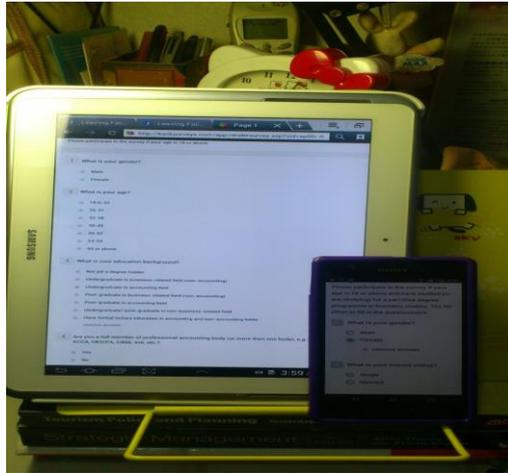
Referring to Exhibits 3a and 3b, one can see that the response rates for both surveys surged after the writer had sent out invitation via Facebook messages. As there were more than one thousand friends in the writer's Facebook, the writer only sent out around 160 invitation messages to his friends to do both surveys. This experience leads the writer to believe that conducting survey on this Facebook platform of the writer with email invitation is a quite useful approach in terms of obtaining a large number of quality response from his friends within a short period of time. For that, it is important to show sincerity in invitation to Facebook friends to participate in online survey. Moreover, the subsequent message exchanges between the writer and the respondents offered a good opportunity to chat with these friends on Facebook. It in itself was a satisfying experience; thus this emailing practice is good for maintaining friendship with them, see Exhibit 4.

**Exhibit 4: two reply messages from two of the survey respondents, offering an opportunity for greeting with them.**



The writer's assessment of the advantages and disadvantages of conducting Facebook-based survey is largely compatible with the evaluation viewpoints from Andrews *et al* (2003) and Matsuo *et al* (2004). The main difference is that, unlike the situation in 2003 and 2004 when these writers published their articles, the technology, i.e., the Facebook platform, the online survey tools, and the mobile devices, these days are much more reliable, flexible, powerful, user-friendly and widely available. For example, respondents are able to fill in the online survey questionnaire via desktop computers, smartphones or computer tablets with good response time and with a user-friendly user-interface, see Exhibit 5.

**Exhibit 5: The appearance of the online survey questionnaire on a computer tablet and a smartphone**



After finishing the questionnaire surveys, the data can be easily exported from the survey tool to Excel for further analysis with the data filtering and statistics functions (e.g. multi-regression analysis) of Excel, if required (Ho, 2014b). As this article is not a survey tool user-guide, it is not going to provide further details on how to use the functions of an online survey tool. Nevertheless, for this writer, learning the online survey tool as a beginner to become one who was able to construct a questionnaire to launch as a survey in Facebook took about 2 hours. Admittedly, the writer has not tried out all the features and functions of the survey tool at that time. Certain online survey tools' features, such as visual images usage and complex skip patterns in question guiding (Shropshire *et al.*, 2009), have not been utilized in these three online surveys. In any case, the free-of charge version of the online survey tool of kwiksurvey has certain limitations, e.g., no open-ended (text) questions, no built-in email distribution and surveys removed after six months. All told, it is quite feasible to use Facebook-based questionnaire survey as an agile academic research approach.

## **Concluding remarks**

The experience by the writer of conducting Facebook-based questionnaire survey largely confirms the evaluation viewpoints in the academic literature on online survey around 2003-2004. Nevertheless, the survey tools, the social media platform of Facebook, and the computer desktops/ mobile devices that we now have are much more powerful and user-friendly. This paper also shows that, used properly, social network sites, such as Facebook, can be quite valuable for the conduct of academic research in an agile mode. While some of the readers do not have 1,400 friends in their Facebook, they can request their Facebook friends to share their survey links on their friends' friends' Facebook walls. In this respect, it is very likely that, from a social network analysis perspective (Foton Labs, 2014; TED, 2010), a survey researcher's location in his/her social network structure, e.g., in the network hub or the periphery position, does affect the effectiveness of using Facebook to conduct an online survey. Certainly, the fact that the survey tools, Facebook and mobile devices are widely accessible in Hong Kong does not follow that it is inevitably the case in other places of the world. Also, though the focus of the paper is on Facebook-based questionnaire survey, it is clear that (i) a research design may also employ other research methods with survey research in an integrative mode and (ii) powerful online survey tools are no substitute for sound research methods knowledge that can only be gained via dedicated intellectual learning over a long period of time. Thus, Facebook-based questionnaire survey is not a silver bullet for a busy part-time university student in business management who has not read a book on Research Methods, has difficulty to comprehend academic articles, but intends to complete a 10,000 word dissertation report in 3 months' time. Nonetheless, this paper informs university students in business studies how to make use of social network sites to conduct academic research

with tight time-constraint. In this respect, it also has pedagogical value.

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