Bulletin of the *Transilvania* University of Braşov • Vol. 2 (51) - 2009 Series V: Economic Sciences

MARKETING RESEARCH USING ONLINE SURVEYS

A. LANDOY¹ A. REPANOVICI²

Abstract: In this article, quality criteria for electronic survey design and use based on an investigation of recent electronic survey literature are presented. The results show that a hard-to-reach audience can be reached using the quality criteria that are most important for reaching these types of audiences. It is presented one online questionnaire for the academic staff community at Transilvania university of Brasov, Romania. The Limerik one was tested.

Key words: marketing research, academic research, online survey.

1. Introduction

Some knowledge concerning the design and use of paper-based surveys does translate into electronic formats. However, electronic surveys have distinctive technological, demographic, and response rate characteristics that affect their design, distribution, and response rates . In this article, we present the results of a comprehensive investigation into the nature of electronic surveys and current methodological approaches.

Quality criteria across five important methodological components are explored.

These include survey design, participant privacy and confidentiality, sampling and participant selection, distribution and response management, and survey piloting.

This is followed with a case study of one survey applied at Transilvania University, using the Limerik type of electronic questionnaire. Text-based e-mail electronic surveys have existed since 1986 and Webbased surveys since the early 1990s (Kehoe & Pitkow, 1996, [2]; Kiesler & Sproull, 1986, [3]). The differences between the two have been reduced now that e-mail is multimedia capable. However, there are several important differences. Web-based surveys allow automatic verification and survey response capture in databases. Copyrighted software applications such SurveyWiz, as FactorWiz, QUIS, Survey Pro, Survey Said, Zoomerang, Survey Monky, andWebSurveyor eliminate manual construction and 186 Andrews, Nonnecke, Preece administrative challenges (Birnbaum, 2000; McCoy & Marks, 2001, [3]). However, Web-based surveys do not provide e-mail's "push" affordance and must be integrated with it to create the "pull" effect to bring people to the survey.

¹ Bergen University, NORWAY.

² Dept. of Fine Mechanics and Mechatronics, *Transilvania* University of Braşov.

2. Survey Design Quality Criteria

- Supports multiple platforms and browsers/e-mail clients
- Controls for browser settings
- Detects multiple submissions automatically
- Presents questions in a logical or adaptive manner, for example, provides control of when and how questions are displayed
- Allows saving responses before completion
- Collects open-ended or quantified-option responses
- Provides automatic feedback with completion
- Uses paper questionnaire design principles. Provides automatic transfer of responses to a database
- Prevents survey alteration
- Provides response control and economical displays
- Provides for links to definitions, menus, button and check box options, animation, sound, graphics options, and so forth
- Does not require familiarity with survey presentation software
- Displays appear quickly to participant
- Tracks response source of response failure
- **3.** Privacy & Confidentiality Quality Criteria
- Participants can designate conditions of release, use, retention and disposal of personal data
- Sample only from public e-mail lists, online communities and automated mailing lists

- Send invitations and surveys separately
- Collect data through Web pages
- Provide multiple response options
- Use "re-mailers" to ensure anonymity
- Do not troll through observation
- Do not use "cookies"
- Do not use links from personalized sites
- Provide disclosures
- Provide third party privacy certification
- Use credible domains
- Use encryption for sensitive material
- Use hypertext links for long disclosures
- Disclose sampling procedures
- Obtain community leader consent
- Provide survey results to respondents
- Use self-selected user identifications and passwords (option)
- Provide "rather not say" response option. Allow people to "opt-in" (Establish credibility quickly through subject lines and opening statements. Guarantee that no one will see one's personal data, not anonymity as researchers will know who the participants are, and explain the method for maintaining confidentiality.

4. Survey Design Features Affecting Response Rates

In Transilvania University of Brasov, Romania we design one online questionnaire tasted to academic university staff about Attitudes, Difficulties and Interest of the Academic Community in Institutional Repository.

We present our design of survey and methodology:

Warning: You are still using the default password ('password'). Please change your password and re-login again.					
	Surveys: [Atitudini, opinii și compor 🖬 🔮 🕜				
Survey ATITUDINI, OPINII ȘI COMPORTAMENTE ALE CADRELOR DIDACTICE UNIVERSITARE PRIVIND CONSTITUIREA UNUI DEPOZIT TRANSILVANIA (ID:12256)	DIGITAL INSTITUȚIONAL CU PRODUCȚIA ȘTIINȚIFICĂ A UNIVERSITĂȚII				
> 🛯 🗟 🏶 🗎 🚳 🎝 🏝 🚰 🔂 🛅 🚱 🖄 🚿	Groups: Please choose				
Edit survey – step 1 of 2					
General Presentation & navigation Publication & access control Notification & data management Uploa	aded resources management				
Base language: Romanian - Românesc					
Additional languages:	Albanian - Shqipe Arabic - (254 Bagque - Eurkara Bornian - Bornapoxu Bulgatan - Sarrapoxu Catalan - Catala				
Administrator: Your Name					
Admin email: your@email.org					
Bounce email: your@email.org					
Fax to:					

Save and continue >>

Fig. 1. How to do a survey

We used Limerik.

Warning: You are still using the default password ('password'). Please change you	r password and re-login again.				
Administration Logged in as: admin	•				
	Surveys: Atitudini, opinii și compor 🖬 🕐 🕜				
Survey ATITUDINI, OPINII ȘI COMPORTAMENTE ALE CADRELOR DIDACTICE UNIVERSITARE PRIVIND CONSTITUIREA UNUI DEPOZIT DIGITAL INSTITUȚIONAL CU PRODUCȚIA ȘTIINȚIFICĂ A UNIVERSITĂȚII TRAMSILVANIA (ID:12256)					
D • 🗟 🏶 🖻 🕰 🕞 🏲 🏝 🖻 🕃 🗟 🗟 🚳	Groups: Please choose				
Title: ATITUDINI, OPINII ȘI COMPORTAMENTE ALE CADRELOR DIDACTICE UNIVERSITARE PRIVIND CONSTITUIREA UNUI DEPOZIT DIGITAL INSTITUȚIONAL CU PRODUCȚIA STIINȚIEĂ A UNIVERSITĂȚII TRANSILVANIA (ID 12256)					
Survey URL (Romanian): http://econ.unitbv.ro/limesurvey/index.php?sid=12256⟨=ro					
Description: ATITUDINI, OPINII ȘI COMPORTAMENTE ALE CADRELOR DIDACTICE UNIVERSITARI PRODUCȚIA ȘTIINȚIFICĂ A UNIVERSITĂȚII TRANSILVANIA	E PRIVIND CONSTITUIREA UNUI DEPOZIT DIGITAL INSTITUȚIONAL CU				
Welcome: În vederea efectuării unui studiu privind "ATITUDINI, OPINII ȘI COMPORTAMENTE UNUI DEPOZIT DIGITAL INSTITUȚIONAL CU PRODUCȚIA ȘTIINȚIFICĂ A UNIVERSI la următoarele întrebări. Vă asigurăm de confidențialitatea răspunsurilor dumneavo reușta cercetării.	ALE CADRELOR DIDACTICE UNIVERSITARE PRIVIND CONSTITUIREA TĂŢII TRANSILVANIA", vă rugăm să aveți amabilitatea de a răspunde oastră. Corectitudinea acestora este de o mare importanță pentru				
Administrator: Your Name (your@email.org)					
Fax to:					
Expiry date: -					
Template: default					
Base language: Romanian - Românesc					
Additional languages:					
Exit link:					
Number of questions/groups: 34/3					
Survey currently active: Yes					
Survey table name: lime_survey_12256					
Hints: Answers to this survey are anonymized. It is presented question by question. Participants can save partially finished surveys No email porticipation					
Regenerate question codes: [Straight] [By group]					

Fig. 2. How to modify a question

LimeSurvey					
Warning: You are still using the default password ('password'). Please change your password and re-login again.					
	Surveys: Acces liber la informatie	J 🕐	ൾ 📀		
Survey Acces liber la informatie (ID:87276)					
A # A # A # A # A # A # A # A # A #	Groups: 1111	J 🖓			
Group 1111 (ID:2)					
🕞 🎦 🖉	Questions: Please choose	I 🖓			
Edit group					
English(Base language)					
Title: Test					
Description.					
Update group					

Fig. 3. Creating one question group



Fig. 4. Question types

Following the introduction and informed consent pages, the survey questions were divided into three sections, each having a "submit" (save) button. Questions were not numbered. The first section contained demographic questions, the second section contained questions about the online community where the invitation was posted, and the last section contained questions about an online community that the participant had permanently left. This last section was optional. Coded questions used drop-down menus, radio buttons, and check boxes with nominal scales, Likert scales, semantic differential scales, and single and multiple choice selection options (Figure 4). Open-ended questions were limited to optional opportunities at

the end of a coded question set and were presented via text-input boxes with wrapping and scrolling, not single-line entry.

DI	owse responses					
E	🛃 🕕 🗅 🖿 🕒 💽 🚭 🚳					
	Data entry					
	ATITUDINI, OPINII ȘI COMPORTAMENTE ALE CADRELOR DIDACTICE UNIVERSITARE PRIVIND CONSTITUIREA UNUI DEPOZIT DIGITAL INSTITUȚIONAL CU PRODUCȚIA ȘTIINȚIFICĂ A UNIVERSITĂȚII TRANSILVANIA ATITUDINI, OPINII ȘI COMPORTAMENTE ALE CADRELOR DIDACTICE UNIVERSITARE PRIVIND CONSTITUIREA UNUI DEPOZIT DIGITAL INSTITUȚIONAL CU PRODUCȚIA ȘTIINȚIFICĂ A UNIVERSITĂȚII <i>TRANSILVANIA</i> Grup 1					
1	*Considerați că oferirea unui serviciu de tip depozit instutuțional digital de către universitate, reprezintă o condiție esențială pentru alinierea universității la cercetarea ştiințifică internațională:	Please choose 💌				
2	*La care din urmatoarele tipuri de publicare ati apelat mai des?	Please choose				
3	*Va rugam sa ordonati avantajele publicarii în acces liber (raspuns multiplu)?	Your choices: Your ranking: Accesul cercetatorilor din [] 1 Recunasteres a stinitions 2: Autorul detine dreptul de a 3: Cresterea vizibilitatii cerce 4:				
4	*Cum apreciati volumul de informatii pe care le detineti, despre publicarea în acces liber?	Please choose.				
5	*Considerati ca este nevoie de constituire unui depozit institutional digital cu productia stiintifica a universitatii?	Please choose 💌				
6	*Va rugam sa apreciati calitatea informatiilor detinute de aceste materiale :	Projectele de diploma a studentilor Please choose. Dizertatii masteranzi Please choose. Teze de doctorat Please choose. Volumele unor conferint Please choose. Budatioul universitatii Blease choose.				
		Articole stiintifice Please choose.				

Fig. 5. Introducing data and visualizing questions

Export results Image: Constraint of the second se				
	Export responses (52 Columns) Questions C Abbreviated headings C Full headings Question codes Filter incomplete answers C Answers C Answers Format C Microsoft Word (latin charset) C Microsoft Word (latin charset) C Microsoft Word (latin charset) C CSV File (all charsets) C ppF Export data	Column control Choose columns: 2 1: id 2: completed 4: 22256x3X1 4: 2256x3X1 4: 2256x3X1		

Fig. 5. Results

5. The Quality Criteria for Electronic Surveys Provide Choices

We did not implement all the recommended criteria for quality electronic surveys but did implement those that made sense for the research objectives, context, and content of this study. As discussed previously, the survey succeeded in reaching a significant portion of hard-toinvolve academic staff online community participants. From the case study experience, the most important criteria contributing to survey success appeared to be the following:

- For design, all the criteria except adaptive question presentation, which was not used.
- For privacy and confidentiality, the criteria of full disclosure of study purpose and sampling procedures, those items that help to establish researcher credibility, and the promise of confidentiality and not requiring identification, although as mentioned earlier, compromises may be needed to protect researchers from unpleasant, unsolicited e-mail.
- For encouraging high response rates, the multistep invitation and survey presentation process. Most important,

we responded to all inquiries rapidly and in detail.

6. Conclusion

The electronic survey had good participation from the community that we wanted to survey.

Dependance on internet connection, and not having the possibility of saving answers, led to having a few abandoned initiatives.

References

- 1. Birnbaum, M. H. (2000). Surveywiz and factorwiz: Javascript web pages that make html forms for research on the internet. *Behavior Research Methods, Instruments and Computers, 32*, 339–346.
- Kehoe, C. M., Pitkow, J. E., & Morton, K. (1997). *Eighthwwwuser survey*. Retrieved September 17, 2002, from http://www.gvu.gatech.edu/user_surve ys/survey-1997-10
- Kiesler, S., & Sproull, L. S. (1986). Response effects in the electronic survey. *Public Opinion Quarterly*, 50, 402–413.