

Mobile phone text messaging: a tool for data collection in PNG

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INTRODUCTION

Papua New Guinea (PNG) has rich cultural heritage and abundant natural resources, but performs poorly on a wide range of development indicators. The country has topographical obstacles such as high mountains, wide rivers and islands which make transport and communication costly, difficult and time-consuming. Data collection in PNG is challenging, particularly the collection of data from rural and remote areas. This paper outlines the results of a trial project which has utilised mobile phone text messaging to collect data from around PNG. Text messaging, or SMS (Short Message Service), is possible using all types of mobile phone handsets and does not require a data connection.

Text messages containing questions were sent to clerks at District Courts throughout PNG. Clerks received some introductory over-the-phone training regarding the purpose of the project and how to respond to the SMSs. The frequency and quality of their responses were tested. Clerks were also asked questions at the conclusion of the data collection period in order to assess their experiences of responding to SMS questions.

The project involved the collection of data on the role of District Courts in supporting Village Courts to use enforcement provisions allowed under the Village Courts Act 1989. The initiative followed a 12-month-long process of trying, unsuccessfully, to collect data using hard copy survey forms

The project is a joint project of the Department of Justice and Attorney General (DJAG), through the Village Courts and Land Mediation Secretariat (VC&LMS), and Magisterial Services (MS). It is funded by the Australian Aid program through the Economic and Public Sector Program (EPSP). The project is overseen by a joint steering committee from both agencies, with support from EPSP and the Papua New Guinea Australia Law and Justice Partnership (PALJP).

METHODS

Research associated with this project has adhered to accepted standards of good practice in research ethics. Research methods have included: a two-month-long data collection trial using mobile phone text messaging, two surveys conducted verbally and over-the-phone with participating clerks, and in-depth telephone interviews with nine clerks (two from each region plus one from the Autonomous Region of Bougainville).

RESULTS

The findings indicate that questioning through mobile phone text messaging can be a useful way of collecting data from contacts spread throughout PNG. Data received is timely, by contrast with a commonly used system of asking remotely based workers to post paper forms to a central office.

Clerks found the process of responding to SMS questions easy (89.3% said it was easy, 10.7% chose a medium level of difficulty and no-one classified the experience as difficult) (n = 28). Over half of the respondents found the process to be quick, while some thought it was time-consuming (53.6% of respondents found the process quick, 39.3% found it to be taking a middling amount of time and 7.1% found the process to be time-consuming). Participants enjoyed the experience of sending in data through SMSs (57.1% said it was fun, 39.3% medium and 3.6% boring).

CONCLUSIONS

The analysis has found that data collection through mobile phone text messaging is a useful tool in the PNG context. The project has demonstrated the value of the use of mobile phones in collecting data quickly. It shows the potential for large-scale data collections in a context where communication systems are largely undeveloped and/or struggling.

The use of SMS does not require a data connection or plan. It does not require an advanced phone. SMSs can be received and sent using any phone, from a basic, cheap handset through to the most advanced smartphone. SMS is quicker than posting forms, and does not require a large investment in technology or infrastructure.

RECOMMENDATIONS

The project suggests that the use of mobile phones could prove very useful and cost effective in evaluations and reviews requiring complex data collection, good sample size(s), and valid information. There is strong potential for this methodology to reach remote and previously excluded participants.

SMS questions need to be written so as to be clear and concise. Questions should be tested with members of the target group before being finalised. A user-friendly question-and-answer approach can be implemented with over-the-phone training, thus mitigating the need for target group members to undertake costly travel to attend face-to-face training.

There are concrete advantages to using SMS for data collection in PNG. It is particularly suitable to collecting data from locations where there is no postal service, no electricity, and no landline telephones or fax machines. It is recommended that data collection utilising SMS be undertaken in a carefully planned manner with strong participation of stakeholders in the design and implementation. The methodology can be complemented by other qualitative evaluation and research methodologies.