REAL-TIME TECHNOLOGIES FOR RESEARCH AND CLASS PROJECTS IN MARKETING

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ABSTRACT

Market research both in the classroom and "real world" activities is facing an evolution of the telecommunications industry and in the way we communicate with each other. This paper examines real-time technology for survey building, data collection and analysis of data... all online, all instantly.

INTRODUCTION

Market research and teaching activities present new challenges in a world where written electronic communications is becoming instant and more predominant that traditional phone call. This ability to communicate not only increases access to customers and businesses, but changes expectations for customer service, customer satisfaction, employee feedback, and competitor tracking.

Taking a simple example of customer satisfaction research, the literature shows that studies of customer satisfaction conducted during the 1990s have one consistent finding: customers are increasingly less and less satisfied with the service they are receiving. In fact, a recent book targeted to business managers consisted of little more than a compendium of customer-service horror stories. Perhaps more interesting is the fact that this decreasing satisfaction is occurring at the same time that companies are claiming to be more customer-oriented than ever before. A Business Week cover story from the beginning of the decade has even proclaimed that the customer was king.

We now look for "7x24, instant, real-time, without waiting, have it your way" service. Access to real-time products, service and information may have created customers that are more demanding. Regardless of the underlying rationale for current perceptions about service levels, unsatisfactory service creates a gap that can be exploited by a firm's competition. These gaps can be even more pervasive as a company goes global since cultural, regulatory, and infrastructure factors each impact the ability of a company to "meet customers' real needs."

Concurrent with this increased expectation of customer service is the increased need for more timely and complete information gathered and analyzed for differences by geographic, cultural and other useful segments. As service expectations increase, so do the needs for real-time customer feedback and monitoring.

With the advent of today's online and wireless technologies, we see greater scope and depth of research in our academic research, in our class projects, and in professional research. This paper discusses a new technology that offers a generalized solution for increasing the access and speed of survey research activities.

SURVEYPRO.COM: FOR ONLINE RESEARCH

Surveypro.com is the site of an On Line Application Processing (OLAP) tool for general-purpose survey research that integrates the building, data warehousing, and analysis of on-line surveys into an easy 1-2-3 step process. Templates from a survey library are combined with survey creation wizards to make creating advanced surveys both easy and convenient. To date, one of the major stumbling blocks of Internet research has been the time and expense to "wire" the survey input into a database, after which the database is converted into files for analysis.
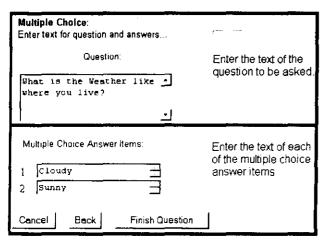
One of the breakthrough developments of Surveypro.com is the automatic creation of a database and an icon based analysis tool that operates with a click of the mouse.

The heart of Surveypro.com is a set of advanced tools for sophisticated questioning. Data may be collected using formats for text input, generalized multiple choice, multiple choice batteries, rank order and constant sum questions. Answer order may be randomized and selection options include controls for picking exactly 1 of N, K of N, or as many as K of N possible responses.

FIGURE 1
GENERALIZED MULTIPLE CHOICE WIZARD

Multiple Choice Wizard (Specifications Page):
Display Options
(• CheckBox / Radio Buttons
(Dropdown Menu Box
(• Vertical   (Horizontal **Scale Orientation**

Specify the Number of Answers: (Help is available below)

(Exactly   OR   (• As Many As...

[1 ▼]   OF   [2 ▼] Possible Answers

⊏ Check to rotate the order of choice items across respondents
⊏ Check to force the respondent to answer

Optional Pre-Question Description or Instruction
[▲]
[▼]

Cancel | Next Step |

HELP
The multiple choice wizard is extremely flexible. You can form simple

Multiple Choice:
Enter text for question and answers...

Question: Enter the text of the
                              question to be asked.
[What is the Weather like ▲]
[where you live?   ]
[▼]

Multiple Choice Answer Items: Enter the text of each
                                 of the multiple choice
1 [Cloudy   ]   answer items
2 [Sunny   ]

Cancel | Back | Finish Question |

When the survey questions are developed, the question and response format are automatically mapped to the database builder so that the database is built and completed with the questionnaire. This development is totally transparent to the user. All that remains for the user to do is to distribute the survey URL or the actual survey by e-mail, wait for the completed surveys to be submitted, and then click on the analysis button to produce simple tabulations (counts and percentages), and standard horizontal and vertical bar charts, and pie charts.

Once the survey is constructed, a sophisticated branching algorithm may be used to direct a respondent from any answer to any question that follows. This branching technology enables qualification questions, multiple language formats and the use of alternative in-dept text questions as a follow-up to classification questions.

INSTANT DATABASES

For the researcher, this tool offers the ability to collaborate with colleagues in both development and collection of cross-cultural data, all on a real-time basis.

SURVEY DISTRIBUTION FOR REAL-TIME RESEARCH

There are six ways to link to or distribute a research survey. You will note that the examples given are already setup with links to an individual survey... just change this to your own survey information for the code provided. Note that all of these methods are not equally productive. Industry research shows that method 1, a letter that contains a viewable survey, produces response rates 40% higher than does letters that contain only a link to a survey.

Assume your survey address is:
http://www.surveypro.com/cgi-bin/surveypro/run_survey.cgi?id=29

Method 1: E-mail Survey (Viewable in the E-Mail)
Current browser technology permits HTML web pages to be viewed as part of the content of an e-mail message. Method 1 is basically one of forwarding a viewable survey to your list of respondents.
To administer an e-mail survey, follow the following steps:

1. Prepare your mailing list.
2. Prepare your survey. This is done by forwarding the email message containing the survey.

You will note that when you forward the message, the sender information from the original message will appear at the top of the message. Of course you don't want this information in your message, so simply go into the message and edit out this text.

You may also type an additional text message to the top of the survey if you desire (Such as a note asking them to participate in your survey).

3. Test your result by forwarding the original message to your own e-mail address until you are satisfied with your message.

4. Finally, add your e-mail list to the "To:" list and send the message to those on your e-mail list.

Method 2: Adding Text Link to Your E-Mail Letter

A hyperlink may be inserted into your e-mail letter to prospective respondents.
The respondents will receive your e-mail requesting their participation and asking them to click on the "Survey" .

Creating a hyperlink:
1. Type your e-mail letter.
2. When finished, highlight (using your mouse) the text you want to have linked (In this example, it is "test").
3. After highlighting, click on "Insert" "Hyperlink" from the e-mail software menu.
4. When it asks you for the link URL or address, enter the address of your survey:

http://www.surveypro.com/cgi-bin/surveypro/run_survey.cgi?id=29

If completed successfully, the words "Survey" will be underlined and be a link that connects to your survey.
A new browser window will be opened and the survey is displayed in it.

Method 3: Adding a Button Link to Your E-Mail

The sample button may be added to your to your e-mail message as a way of accentuating the request to participate in a survey.

Note that some e-mail programs are not capable of viewing or inserting graphics as part of the e-mail. If you are using this option, be sure that your e-mail program is capable of sending and receiving graphics.

As a fail-safe for those who will receive your e-mail and do not have a graphics capable e-mail clients, use both a text link and a graphics link (methods 2 and 3 simultaneously).

1. Insert the graphic into your e-mail by selecting "Insert" "Picture" and then entering the picture source as:
 http://www.surveypro.com/pieces/ssbutton.gif   The button will then appear in your document as below.

2. Next, highlight (using your mouse) the button.
3. After highlighting, click on "Insert" "Hyperlink" from the e-mail software menu.
4. When it asks you for the link URL or address, enter your survey address:
http://www.surveypro.com/cgi-bin/surveypro/run_survey.cgi?id=29

The survey button will now be activated as a link to your survey

Survey |

Method 4: Adding a Text Link to Your Web Site

A web link would be inserted by you into the HTML of your web page. The HTML for this link appears as:

<AHREF="http://www.surveypro.com/cgi-bin/surveypro/run_survey.cgi?id=29">test</A>

In this case the words "Survey" would appear on your web site as a link that would connect to your survey. Under this option, when you click on the link the browser goes to the survey.

Method 5: Open a Separate Browser Window From a Web Site Link

In this case of a web link tha could be inserted by you into the HTML of your web page. This JavaScript opens separate browser window for taking the survey and leaves your original browser window pointing at your web site. The HTML for this link appears as:

```
<script language="JavaScript">
<!--
function openWin( windowURL, windowName,
windowFeatures ) {
  return window.open( windowURL, windowName,
windowFeatures ) ;
}
// -->
</script>
```

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```
<A href="JavaScript: newWindow = openWin(
'http://www.surveypro.com/cgi-
bin/surveypro/run_survey.cgi?id=29, ",
'toolbar=0,location=0,directories=0,status=0,menuBar
=0,scrollBars=0,resizable=0' ); newWindow.focus()">
test
</A>
```

The first part of the link in quotes includes the address for your survey and the second "test" is the text that you would like to have your respondent click on.

Method 6: Adding a Button Link to Your Web Site

The sample gray button shown below is added to your site by adding the following html statement to your web site.
The lines of this HTML command respectively do the following:(1) create a link to the graphic, (2) identify the source of the graphic, and (3) end the link.

Survey |

```
<BR><Ahref="http://www.surveypro.com/cgi-
bin/surveypro/run_survey.cgi?id=29">
<IMG alt="" border=0 height=31
src="http://www.surveypro.com/pieces/ssbutton.gif"
width=88></A>
```

ISSUES FOR REAL-TIME RESEARCH

The ability to conduct real-time research using e-mail, the web, and other electronic media (such as WAP) opens many doors for the researcher. Likewise, the prospect of making class research projects less painful and more direct to the point of completion is certainly desirable. Internet research adds increased points of access, more interactivity, faster communications and time to completion, and greater ease of use. Conducting research throughout the world using Internet communications appears to be a realization of the researcher's dream.

In recent weeks, the author conducted an e-mail survey of holiday shopping activities that included more than 100 questions about lifestyle, computer usage and demographics. 20,000 e-mail surveys were sent with an 11% response rate. All responses were received within a week and because the data was automatically entered into the database, no data entry was required and data cleaning was minimal.

In practice however, there are limitations to this research channel. The Internet brings difficulty in accessing respondents, assuring a representative sample, increasing problematic response rates, breaching the gap of Internet anonymity, and assuring privacy and security in the responses and databases.

The basic issues that impact real-time methodologies for conducting survey research are discussed in detail the presentation of the paper.

CONCLUSIONS

The Online Application Processing approach to survey research opens a new door for not only understanding, but addressing cultural differences in the business world. Furthermore, this survey methodology brings with it the economies of electronic research in terms of cost savings, time savings, and ease (of implementation, coordination, and analysis).

The merging of the research approach discussed in this paper with the study of business, consumer and employee decisions leads one to quickly observe that the methodology discussed is particularly applicable to student projects and faculty research including cross-cultural business and academic research where the populations may be sharply defined (country, smaller geographic areas, language, or ethnic grouping) and encouraged to participate in the studies.

At the time of this writing, Surveypro.com supports academic and student research projects at no cost. For an academic account:

1) Register with Surveypro.com and establish a user ID and password and start developing your survey.

2) Email your request for an academic upgrade.

Please include
a) your name, position, and university affiliation,
b) a one to two paragraph project description,
c) the approximate number of questions,
d) the sample size, and
e) the start and end dates for your project.

Requests should be sent to
research@surveypro.com