

Business Survey Response Rates – Can They Be Improved?

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Abstract

Business surveys are often challenged with low response rates. Unlike many U.S. Census Bureau business surveys where businesses are mandated to participate, businesses often refuse to disclose their financial information in private sector surveys. In the past, researchers have been focused on the effect of incentives, advance, and thank you letters. In this paper we focus on the survey length and incentives as an influence to the response rate. A *Convenience Store News* industry business survey sample was randomly divided into two groups of equal size. One group received a long survey of eight pages while the other group received a short survey of four pages containing only key questions. The survey follows standard business survey methodology. We used multiple survey modes, and implemented the survey using Dillman's total design methods with an advance letter, a second mailing, and a reminder (Dillman, 2000). Each respondent received a small monetary thank you gift with the first mailing. In this paper, we will present an analysis of the effect of the long and short survey forms and incentives on response rates.

Keywords: Response Rate, Business Surveys, Questionnaire Length, Incentive

1. Introduction

The Quantitative Economics and Statistics (QUEST) Group within Ernst & Young LLP was established in 1994 to tackle difficult economic, statistical, policy, and quantitative issues in a variety of business areas including finance, healthcare services, telecommunications, manufacturing, entertainment, retail and real estate. The group of about 30 professionals is located in Washington DC.

The QUEST Group conducts many establishment surveys. These surveys include customer satisfaction, employee preference and retention, best practices, state of the industry, and industry trends. Our clients often need information that is not currently available or is sensitive in nature such as financial and salary data.

The trade publication, *Convenience Store News*, has been conducting a Convenience Store Industry Survey for nearly 25 years. This industry survey focuses on

marketing, merchandising, and innovation. The detail of the categorical data in the report was expanded by teaming with various data partners in 2004. Since 2003 QUEST has been engaged by *Convenience Store News* to assist with their industry survey.

2. Tests

Business surveys are often challenged with low response rates. This is especially true for business surveys that seek sales and other financial data. Unlike many U.S. Census Bureau business surveys where businesses are mandated to participate, businesses often refuse to disclose their financial information in private sector surveys. As the response rate has dropped the need and demand for such data has increased. In addition to response rate issues there are generally more restrictive time and cost constraints in private sector surveys.

We tested two options in 2005 to improve the response rates from 2004. The first test was the use of a monetary incentive and the second was a long versus short form survey.

Incentives have been widely used to boost response rates. Monetary incentives are second only to multiple contacts in improving mail survey response rates (Dillman, 2000). Other meta-analyses found significant, positive results from the use of monetary incentives (Yammarino, Skinner, and Childers, 1991).

Our second test was that a shorter, less complicated survey would result in higher return rates than a longer, more complicated survey. The past research has shown mixed results. Greer (2000) found higher return rates for questionnaires that have fewer pages and questions. However, Hager (2003) did not find a significant difference in return rates between the longer and the shorter survey instruments.

3. Methodology

The 2005 *Convenience Store News* Industry Survey followed standard business survey methodology. Our primary mode was a mail survey instrument with telephone reminder and possible follow-up. We implemented the survey using the total design method with an advance letter, a second mailing, and a reminder. The initial mailing was January 2005.

There are approximately 138,000 convenience stores in the United States ranging from a small corner store to the large multi-store chains. The 2005 *Convenience Store News* industry statistical sample was 400 single and 400 multi-store owners. Each respondent received a monetary incentive with the first survey mailing. A \$10 incentive was mailed to each single store owner. A \$20 incentive was included in each multi-store owner survey.

Additionally, the total sample was randomly divided into two groups of equal size. One group received a long survey of eight pages while the other group received a short survey of four pages containing only key questions.

Each respondent received a reminder post card, an appropriate second mailing of the survey instrument, and a telephone follow-up call if we had a contact phone number. Tracking numbers were used on each survey.

The long and short forms asked similar questions with more detail asked in the long form. A summary of the topics is shown below.

| Topics in 2005 Questionnaire | Long Form | Short Form |
|---------------------------------------|-----------|------------|
| Store Profile and Total Sales | x | x |
| In-store Sales | | |
| Overall sales | x | x |
| Merchandise details | x | |
| Foodservice details | x | |
| Motor Fuel Sales by Grade, and Volume | x | x |
| Same-store sales | x | |
| Store Development | | |
| Store Size | x | x |
| Property Size, Sales Area | x | |
| Income Statement | | |
| Overall Pre-tax Profit | x | x |

The short form was three pages plus a cover letter. The long form was 7 pages plus a cover letter. Each form was printed in an 8.5 x 11 inch booklet style.

4. Results

The delivery, refusal, and response rates changed noticeably between 2004 and 2005. We selected a much smaller sample in 2005 and with the client's permission invested much more effort to verify the address and making multiple contacts. The results were encouraging.

| Year | Sample Size | Undeliverable Rate | Refusal Rate |
|------|-------------|--------------------|--------------|
| 2004 | 5,200 | 16.4% | NA |
| 2005 | 800 | 4.8% | 4.1% |

The response rates by store type improved considerably compared to 2004 when all respondents received the same survey instrument and no incentive.

| Response Rates | 2004 | 2005 |
|-------------------------------------|------|---------------------------|
| Incentive | None | \$10 single \$20 multi |
| Single Store | 0.3% | 11.1% |
| Multi Store | 2.4% | 10.1% |
| Total Survey Response Rate | 1.1% | 10.6% |
| Final Response Rate * | 4.7% | 15.6% |
| *includes public and purchased data | | |

The total survey response rate for both single and multiple store owners increased from 1.1 percent in 2004 to 10.6 percent in 2005. The final response rate after obtaining public data for those stores in the sample and purchasing some data was 4.7 and 15.6 percent in 2004 and 2005, respectively. The number of stores represented by the responding stores increased from 51,733 in 2004 to 59,134 in 2005.

The 2005 response rates by form length were dramatically different as shown below. There was only one survey mailed in 2004.

| 2005 Response Rates by Store/Form | Percent |
|-----------------------------------|---------|
| Single Store Short Form | 18.9% |
| Single Store Long Form | 3.6% |
| Single Store Total | 11.1% |
| Multi Store Short Form | 13.4% |
| Multi Store Long Form | 6.8% |
| Multi Store Total | 10.1% |

5. Conclusions

Our findings from the two tests that we implemented during the 2005 *Convenience Store News* Industry Survey indicate that a \$10 and \$20 incentive improved the response rates.

There were some empirical results from executives about their firm's policy of accepting incentives. Some felt insulted and noted their feelings on the

returned surveys. Others, 31 stores, simply returned the money.

The short form motivated a much higher response rate but there was some loss of detail in the data received. The survey implementation costs, always an important factor, were lower in 2005 than in 2004. This includes the incentive, telephone follow-up, and additional mailings. However, the sample size was much smaller in 2005.

The telephone follow-up/reminder to stores where we had a contact number was critical. We were able to obtain high level data and this was a good investment.

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