Using the WWW as a Medium for Marketing Research in Financial Services: 
The Case of Xenon Laboratories

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Abstract

The nature of how marketing research is conducted has changed dramatically over the past thirty years. This has been a function both of how the prevailing view of best practice in marketing has developed, and also of the state of technology available to researchers. While it is clear that the WWW will increasingly be used as a medium for conducting marketing research, the full implications of this new medium are not yet fully understood. Existing research has examined the implications of the WWW in terms of the potential dramatic reductions in both the time and cost involved in testing new financial service products. The potential for a financial services firm to analyse the market environment and competitors’ strategies is examined using a case study based on real time marketing research. The case is that of the Canadian Internet financial services provider, Xenon Laboratories, which currently conducts marketing research into the market for credit/charge cards. Through the development of a unique approach to marketing research, Xenon is in a position to understand how the charge structures of different credit/charge card suppliers vary. These findings, in turn, places them in a uniquely competitive position to sell other financial services to those global companies using the services of these different credit/charge card suppliers. The paper discusses the problems associated with traditional methodological approaches to market research and demonstrates the impact that IT and the WWW can have on the process.
1. Introduction

The impact of the introduction of the WWW as a medium for conducting marketing research is little understood. Employing a case-study approach, the present paper looks at the application of WWW marketing research in the credit/charge card market. The case is exploratory in nature and, as a real-world example, is compared and contrasted with more traditional approaches to marketing research. The case demonstrates that the WWW provides an opportunity for companies to re-examine the ways in which they conduct marketing research. In addition, it shows how the innovative use of Web-based research can be used to open up new business opportunities for even the smallest of companies.

In the next section we offer an overview of existing relevant research, outlining the development of marketing research through time, and examine the commercial marketing research applications of the WWW. Section 3 then outlines the background to the case via an introduction to the market for credit/charge cards. Section 4 describes how a traditional marketing research approach to investigating the market would be conceived and implemented, and the limitations of the existing approaches are highlighted. Section 5 outlines the case of Xenon Laboratories and their application of the WWW to the practice of marketing research. On the basis of this strategy Xenon has been able to generate unique industry data which has generated some preliminary findings. Lastly, section 6 concludes the paper by commenting on lessons learned from the case.

2. Existing Research

Marketing research is concerned with the systematic and objective collection and evaluation of information about specific aspects of marketing problems in order to assist management make effective decisions. However, marketing research is not an end in itself, it is a means to an end, the improvement of decision making [1]. The better the quality of information that managers have at their disposal, all other things being equal, the lower level of risk there is associated with strategic decision making. Information is becoming increasingly important, a development which has been fuelled by the introduction and rapid development of IT. As this case study will show, these new developments are giving rise to new opportunities for innovative market researchers.

2.1 An Overview of the Development of Market Research

The operationalisation of marketing research has developed significantly over the last thirty years, and the changes may be categorised into three main eras, as shown in Table 1. The process of development has already moved through two subtle but very different phases, and we are currently entering the third phase. This third, and new phase, is being made possible only by developments in IT and the introduction of the WWW.

The first phase consisted of what to many is still the typical approach to market research. It is typified by the content of many, excellent books on the process of “doing marketing research” (see, for example [2,3]) that dominate the undergraduate courses in the area. The over-riding orientation in this approach is towards understanding buyers as consisting of a mass of different market segments, knowledge about which is to be gleaned through the use of large sample sizes.

The second phase in the development of marketing research was based largely on the initial work of the International Marketing and Purchasing (IMP) group in recognizing the role that relationships played in industrial marketing (e.g. [4,5,6]). This perspective has since been significantly widened to understand the role that relationships play in all buyer-seller environments (e.g. [7]). This required substantial changes to the ways in which marketing research studies were conducted. The focus of attention shifted from the buyer to the buyer-seller dyad itself (see, for example, [8,9]).

It is now becoming increasingly apparent that we are entering a new phase of marketing research, one which can be differentiated from the preceding two. The reason for this difference is the extent to which developments in IT are acting to restructure both markets and marketing [10,11]. Recent developments in areas such as database theory, information science, and data-warehousing have meant that a very different approach to marketing has become possible. As more and more supply chains and buyer-seller relationships are based on the underlying electronic networks connecting them (see, for example [12]), a different view of marketing and of marketing research is emerging.
### Table 1: The Phases of Market Research

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Phase 1 - 1960s</th>
<th>Phase 2 – 1980s</th>
<th>Phase 3 - late 1990s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Type</td>
<td>Statistical quantitative</td>
<td>Increasing focus on qualitative</td>
<td>Real-time data quantitative</td>
</tr>
<tr>
<td>Customer Target</td>
<td>Mass market to segmented market</td>
<td>Focus on existing customers &amp; relationship development</td>
<td>Individual buying unit</td>
</tr>
<tr>
<td>Sampling Approach</td>
<td>Large samples of individuals</td>
<td>Often smaller samples of dyads</td>
<td>Highly biased samples of individual customers</td>
</tr>
</tbody>
</table>

The widespread availability of cheap and powerful information technology means that it is now becoming economically feasible to collect, store, analyse and share almost limitless amounts of marketing data concerning customers details, customer buying patterns, channels of distribution and the performance of economic partners. Large-scale databases coupled with fast processors and high-speed networks effectively remove most geographic and time barriers previously associated with the transmission and processing of data.

The early examples of database marketing are typical of the new marketing initiatives enabled by the innovative use of IT. For example American Express deploys powerful, parallel processors to sift through massive amounts of data, one outcome of which is that individual customers receive a personalised credit card bill. Similarly, General Motors and MasterCard are able to cross-utilise data collected on credit cards to market automotive products [13]. These early initiatives utilised existing channels of distribution to collect the data. More recently WWW based marketing projects have enabled companies to communicate directly with their final consumers or business customers. The emphasis is on marketing directly to the end consumer and collecting retail market data that can be used in the management of the operations as well as strategic planning. It is not only the customer-marketing interface that is affected, but ultimately the organisation of the supply chain as a whole.

In the financial services industry, the effects of IT are likely to be dramatic. The early examples of innovation such as screen-based trading for financial futures and the internet marketing of financial services are the vanguard of a much deeper re-structuring of the financial services industry. Research indicates that while both banks and their customers still perceive there to be risks involved, it is often the smaller companies that are being the most innovative [14,15].

The problems associated with handling large volumes of data are now recognised as a subject area in its own right and are receiving widespread attention in the IS literature. For example Gray and Watson [16] present an overview of data warehousing techniques, tools and case examples from the perspective of decision support. The marketing challenge of information technology varies depending on the history of the organisation. For existing companies the problems of extracting useful information from existing systems may be insurmountable giving rise to a need for major new investments in information systems and associated business processes. For new, start-up companies the challenge is to build an information-focused company from the very start that can take advantage of advanced information analysis techniques to support all aspects of its marketing processes. The next section now proceeds to develop the idea of the third phase of marketing research, focusing on the WWW as a marketing research tool.
2.2 The WWW as a Marketing Research Tool

The use of the WWW as a marketing business tool has become well documented (for example [13,17,18]), however, little research exists as to its full potential as a marketing research tool. It is clear that the WWW will increasingly be used as a medium for conducting marketing research [19,20], however, the full implications of this new medium are not yet fully understood. Existing research has examined the implications of the WWW in terms of the potential dramatic reductions in both the time and costs involved in testing new financial service products [21]; or else has concentrated on comparing the costs, response rates and time horizons involved in conducting surveys via traditional mail versus and electronic media (see Mehta and Sivadas, 1995). The authors’ view the introduction of the WWW as much more than an opportunity to reduce the time-spans and costs involved in the marketing research process. As the case below will show, the WWW presents marketing researchers with an opportunity to re-evaluate their existing approaches to conducting marketing research.

The traditional sources of information for marketing researchers are outlined in Table 2. [23] The ability to collect and the cost of collecting the different forms of information vary greatly. It is collection of primary data, external to the firm, which is considered to be the most difficult/costly to access and collect. This problem is exacerbated by the fact that, in the absence of suitable secondary data, any external data requirements will have to met by primary data collection.

Table 2: Sources of Information for Marketing Research

<table>
<thead>
<tr>
<th>Internal to the Firm</th>
<th>External to the Firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale and costs broken down by products, markets, and types of marketing activities (e.g. advertising, promotion, personnel selling etc.)</td>
<td><strong>Secondary sources:</strong></td>
</tr>
<tr>
<td></td>
<td>Publications: government, trade associations etc..</td>
</tr>
<tr>
<td></td>
<td>Commercial services</td>
</tr>
<tr>
<td></td>
<td><strong>Primary sources:</strong></td>
</tr>
<tr>
<td></td>
<td>Research projects</td>
</tr>
</tbody>
</table>

Although technological advances have been made during the last 20 years, the majority of marketing research techniques appear to be increasingly out-moded [24]. The development of IT has hugely facilitated the collection of internal firm data, and its application to the storage, organization and analysis of data (both quantitative and qualitative) is well documented (e.g. [16]). However, developments in the collection of external primary data have been far more limited. But the combined resources of the WWW and IT are about to open new doors.

This paper argues that the introduction of the WWW not only provides an opportunity for improvements in the marketing research process (i.e. reducing costs and time horizons), but also provides an additional opportunity for simultaneous improvements in the quality and level of the information that may be accessed and collected. These changes, imposed by the introduction of the WWW, are thought to have implications for the way in which marketing research may be conducted.

3. Background to the Case: The Market for Credit/Charge Cards

The objective of the research was to understand how marketing research might be conducted using the WWW in the financial services industry. The example used is that of the market for corporate credit/charge cards, focusing on the value of international business travellers to the card issuers, a significant global financial services market. Typically an organisation provides its employees with a credit/charge card that they can use to pay for travel and out of pocket expenses. Trade data from the main corporate card issuers suggest that employees use the corporate cards rather than their own credit or charge cards to simplify the process of collecting expenses and avoid exceeding the credit limits on their own cards. The employee who does not have a choice of corporate card

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use would expect the company to bear the full cost of the card, particularly when the option of using his/her own card is not permitted by their employer.

The purchaser of the corporate credit card is normally focused on reducing the effort required to administer expense claims and access consolidated information to relationships with key vendors. The issuers of the charge/credit cards have developed complex information systems to achieve two aims. The first is to simplify their own administrative processes. The second is to reduce travel and expense budgets for clients, by both identifying potential abuses of expense claims, and through negotiating lower prices from key vendors. However, the sophisticated information systems developed to reduce employee and vendor costs contrasts with the opaqueness of the revenue sources to the issuer of the corporate card.

Customers borrowing from the card issuer generate the largest portion of the income from personal credit cards. With corporate cards, where the expense bills are normally settled each month, a significant portion of revenue is derived from other organisations in the supply chain. This makes it difficult for any potential new entrant or multinational supplier to determine the actual revenue generated by the existing credit card supplier. In addition, many of the charges incurred whilst making international payments are both hidden and yet surprisingly high [25]. Visible charges include the annual management fee charged to the corporate client; while hidden charges include a foreign exchange surcharge for foreign expenses (not traditionally negotiable even for multinational corporations) and a merchant acquisition charge for processing the payment (obviously not a charge to the corporation adopting the card).

The focus of the present marketing research was the foreign exchange charges that may be incurred by the corporation or its employees. The level of the charges should be determined by the relative power of the trading partners (card issuer and corporate customer) and the visibility of the charges to them. If the market were highly competitive, it would be reasonable to expect pricing for the foreign exchange element of the charge to vary by organisation and card issuer. However, traditional routes to market research offer no insights into how to collect such sensitive data.

In order to develop a greater understanding of this market it is necessary to address a number of key questions. The marketing research questions were outlined as follows:

- are there business travellers that convert their expense receipts into their domestic currency rather than wait for the charge or credit card statement?
- what is the typical foreign exchange surcharge for purchases made with corporate credit and charge cards?
- do the charges vary depending on the country in which the card is issued?
- do charges vary between card issuers (Visa, Mastercard, AMEX etc)?
- do charges vary between different corporations?
- what proportion of corporations do not yet use a corporate credit card?
- what is the proportion of travel expenses made using private cards within organisations that provide corporate charge or credit cards?
- is the proportion of travel expenses made using private cards within an organisation influenced by the foreign exchange rate charged?

The foreign exchange surcharge levied by the card issuer is determined by the difference in the foreign exchange rate used by the card issuer and the mid rate achieved by the card issuer in the foreign exchange market on the date of the payment. The card issuers are all international organisations that are able to net the currency flows among their operations in different countries which results in only a small portion of the total foreign exchange requirement being traded. The rate the card issuer achieves should be very close to the mid rate achieved by the interbank market on a particular day.

A close approximation of the foreign exchange surcharge of the card issuer can therefore be calculated using the information on the card statement and the mid rate for the exchange rate in the interbank market on the day the payment was made using the following simple calculation:

$$\% \text{ Charge} = \frac{y - (x, z)}{y}$$
The paper will now outline how a traditional marketing research approach would be applied in order to address the above research questions. This approach will then be compared and contrasted with Xenon’s approach using the WWW as a medium for marketing research. Some of the initial findings of the research are presented, but we are cognisant of the fact that the research is in its early stages and the data set is not yet sufficiently large to answer all of the questions posed above.

4. Traditional Approaches to Marketing Research

In the absence of published secondary sources, it would be necessary to collect primary data in order to address the above research questions. To complete the calculation details both the employee’s receipt for the original payment and the credit or charge card statement would be required. The key difficulties in collecting the data using traditional methodologies are:

- the identification and targeting of international business travellers
- obtaining copies of both their travel expense receipts and credit or charge card statements

Employing a traditional methodology, business travellers may be identified and approached for an interview, or sent a questionnaire, in either one of two ways: interview in location (hotels, airports), or purchase mail list from travel agency or airline.

However, in this context both methods are considered to be unsatisfactory because they are likely to achieve a very low response rate. The anticipated low response rate is a function of a number of different factors. There are significant barriers to conducting face to face interviews or utilising mailed questionnaires. Firstly, there is the problem of obtaining permission of the owner of the site (hotel or airport) in order to interview business travellers. Secondly, there are the costs associated with having to acquire a suitable list of names if the research is to be conducted by postal questionnaire. In addition to these problems, the anticipated low response rate may be due to the high informational requirement on the part of the respondent as immediate and simultaneous access to both expense receipts and credit/charge card statements are required to make the research meaningful. In addition, it is thought that the high level of information required may be perceived by respondents as being overly intrusive, and thus has an even greater detrimental impact on response rates.

Advertising the questionnaire on business travel sites on the Internet could offer a solution with the travellers given an incentive of some sort to complete the questionnaire (e.g. airmiles). On the basis of our past experience on the Xenon site [21], and industry data from sources such as ad-online, the cost of collecting a potential sample is given below. This is based on the conservative estimate of 2% of people clicking through to the advertisement, of whom 5% then complete the questionnaire.

<table>
<thead>
<tr>
<th>Cost Components</th>
<th>Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click throughs for advertisement</td>
<td>2%</td>
</tr>
<tr>
<td>% of click throughs resulting in a completed questionnaire</td>
<td>5%</td>
</tr>
<tr>
<td>Advertising views per completed questionnaire</td>
<td>1000</td>
</tr>
<tr>
<td>Cost per views ($40/1000)</td>
<td>0.04</td>
</tr>
<tr>
<td>Cost per completed questionnaire</td>
<td>$ 40</td>
</tr>
<tr>
<td>Sample size required (see section 5)</td>
<td>5000</td>
</tr>
<tr>
<td>Estimated Total Cost</td>
<td>$200,000</td>
</tr>
</tbody>
</table>
This approach highlights the problems associated with using traditional approaches. The use of the WWW to attract an audience does provide an improvement compared with the face to face interview or mailings, since it does not require the support of other companies in the travel business. However, the cost and time to purchase the internet advertising could be seen as prohibitive for exploratory research. The paper now continues to examine the application of a WWW based solution to the problem.

5. Conducting Market Research Using the Internet: The Case of Xenon

Traditional forms of marketing research employed in the gathering of primary data external to the firm are plagued by problems associated with cost, accessibility and time horizons. The following case demonstrates the way in which the WWW may provide a novel solution to many of the existing problems of conducting market research.

The original launch of their Universal Currency Converter™ (http://www.xe.net/currency) back in 1995 may be viewed as a "sweetener" in order to identify any potential interested parties. The Universal Calculator is a simple service that converts an amount in a stated currency into a second currency and by April 1998 this service was performing over 1,000,000 calculations each month.

In addition to this service, Xenon have since launched a complementary Currency Update Service™ (http://www.xe.net/currency/subscrib.htm) that forwards daily, via e-mail, a table of exchange rates to interested users, expressed against the user’s choice of currency. This free service has resulted in the generation of a large database of customers receiving daily information on foreign exchange rates (over 44,000 in April 1998 and increasing at more than 100 a day). However, in order to receive this service, the registration page requests information that provides Xenon with a good level of knowledge about both who the users are and also information on how/why they use the service. Findings from the questionnaire highlighted the fact that a considerable number of customers were using the service in order to process travel expense claims.

Through the launch of a range of complementary services, Xenon has built up a large potential user base, which constitutes a sample of self-selecting individuals. The problem facing start-up firms using the internet are the high costs of attracting customers to a new internet site by advertising, therefore, the development of a significant customer base becomes very costly. This trend is set to continue as the WWW becomes increasingly popular as a business medium resulting in increasing competition for advertising space on key sites. Exacerbating this problem is the fact that the identification and then targeting of a potential customer base is inherently. Therefore, firms looking to use this channel must look for new ways of increasing their profile. Xenon Laboratories have attempted to overcome this problem by devising a novel approach to targeting their customers.

The development (and continual expansion) of the customer base was an important first stage in the new product development/market research process. Without such a large (but cheaply generated and highly focused) target market, the subsequent market analysis, service development, testing and communication would be problematic. The information collected via firms registering for this free service has allowed Xenon to gain a better understanding of the market in which they are operating. This information has been instrumental in the later development and testing of new services, as outlined in the next section.

5.1 The Development of the Travel Expenses and Credit Card Calculators

The questionnaire included in the Currency Update Service™ registration indicated that a significant proportion (11%) of the customers’ prime use of the e-mail service was to calculate their travel expense claims. The original Universal Currency Converter™ service provided a benefit to business travellers by increasing the accessibility of the exchange rates and by simplifying the calculation. However, there was a risk that users were under-claiming their travel expenses, due to the exchange rate on the date of the receipt being different to the previous day’s mid rate used by the calculator.1 In addition, the calculator did not include the typical percentage charge incurred for converting the currency. This is a problem since not all credit/charge card providers clearly state their typical percentage charge for converting currency. The Credit Card Charges

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1 The mid rate used by Xenon is that which the Bank of Montreal’s Treasury Group prepares for Canada’s national newspapers: The Globe and Mail, the rates are those taken for large value transactions.
Calculator™ was developed and linked to the Travel Expenses Calculator™ to enable customers to estimate the typical foreign exchange charges of their credit or charge card by inputting the details of a previous statement. As a result a new service, the Travel Expenses Calculator™ (http://www.xe.net/ currency/expenses/), was launched in April 1998 to enable business travellers to improve the accuracy of the converted value of an expense receipt in a foreign currency. The additional functionality provided was to input the date of the receipt to look up the appropriate exchange rate, and to input the typical foreign exchange charges of the credit or charge card used for the payment.

5.2. Conducting Real-Time Market Research

The introduction of the Travel Expenses Calculator™ and Credit Card Calculator™ has enabled Xenon to gain a much deeper understanding of the market for making international payments by credit card. The development of the suite of services enables the company to access information that would not ordinarily be available, would be prohibitively costly or would take a very long time to collect. The introduction of the Credit Card Calculator™ now enables Xenon to access unique ‘real time’ market data (in the sense of collecting it as soon as the user does the currency conversion), an option which would not be open to it through any other form of media. The information which is collected, stored and provided whilst customers use the Credit Card Calculator™ includes the following:

- User’s ID (i.e. individual and/or company address)
- Date
- Host Name
- USD Equivalent
- Receipt Amount
- Receipt Currency
- Date of Receipt
- Value of Claim
- Currency of Claim
- Card Type
- Bank
- Estimated Charge (home currency)
- Estimated % Charge
- Value of Charge
- % Charge

On the basis of this information it is possible to conduct basic marketing research by aggregating the inputted calculations. Xenon are now in a unique position to understand whether or not the different card providers employ the same charging levels, and whether or not these companies’ charge structures vary according to geographical region. This opens up a whole new potential marketing opportunity for the company to co-operate with these firms to negotiate a lower charge structure from the card supplier.

This approach must be contrasted with the dominant methodology of merely disseminating questionnaire based research tools via e-mail. Although there are quantitative improvements to be made via distributing the questionnaire electronically, the problem of low response rates persists. This problem is further exacerbated by the increasing levels of junk e-mails on the WWW, which is leading to a further deterioration in response rates. Using the service-based approach of Xenon circumvents the problem of low response rates and association with junk e-mail. Respondents are inputting data into a service that is beneficial to them, and this therefore leads to an enhanced level and quality of response.

5.3. Preliminary Results

As outlined above, the launch of the credit card calculator has provided a unique opportunity to collect real time market data. However, it was deemed a necessary step to introduce a filter on the incoming data as it became evident from the inputs that not all users were using the service properly. It was for that reason that the data set had to be refined by the deletion of outliers and any multiple entries. The data set was topped and tailed according to the size of the calculated percentage charge for converting foreign exchange (0% to 10%). In addition, all multiple entries were deleted because a number of users become impatient and will repeatedly send the same calculation since the internet is not always immediately responsive.

On the basis of the information collected over a four-week period in May 1998, it has been possible to begin to develop a greater understanding of the credit/charge card market for international payments. For example, the information collected has enabled a preliminary analysis of the major credit card companies’ charges, as shown in Table 4. From these results it is clear that not all of the credit card companies levy the same charges, and that the differences between the different companies is statistically significant at the 5% level.
### Table 4: Analysis of Variance- Different Card Providers’ Charges

<table>
<thead>
<tr>
<th>Source</th>
<th>D.F.</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>34.0382</td>
<td>11.3461</td>
<td>3.1119</td>
<td>0.0264</td>
</tr>
<tr>
<td>Within Groups</td>
<td>352</td>
<td>1283.4086</td>
<td>3.6460</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>355</td>
<td>1317.4468</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean charge</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
<th>95 Pct Conf Int for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Card A</td>
<td>126</td>
<td>2.6348</td>
<td>2.0352</td>
<td>0.1813</td>
<td>2.2759 to 2.9936</td>
</tr>
<tr>
<td>Card B</td>
<td>51</td>
<td>2.2947</td>
<td>1.3947</td>
<td>0.1953</td>
<td>1.9024 to 2.6870</td>
</tr>
<tr>
<td>Card C</td>
<td>146</td>
<td>2.1988</td>
<td>1.8096</td>
<td>0.1498</td>
<td>1.9028 to 2.4948</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>3.2155</td>
<td>2.4594</td>
<td>0.4281</td>
<td>2.3434 to 4.0875</td>
</tr>
<tr>
<td>Total</td>
<td>356</td>
<td>2.4611</td>
<td>1.9264</td>
<td>0.1021</td>
<td>2.2603 to 2.6619</td>
</tr>
</tbody>
</table>

In addition to comparing the charges levied by the different companies, it has been possible to analyse individual firm strategies. For example, it is possible to investigate whether the different card providers employ a regional or a global charging policy in their foreign exchange pricing. The preliminary evidence highlighted in Table 5 suggests that card provider C operates a global policy.

### Table 5: Analysis of Variance- Card C Breakdown by Geographical Region

<table>
<thead>
<tr>
<th>Source</th>
<th>D.F.</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>0.6022</td>
<td>0.6022</td>
<td>0.1829</td>
<td>0.6696</td>
</tr>
<tr>
<td>Within Groups</td>
<td>144</td>
<td>474.2182</td>
<td>3.2932</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td>474.8204</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
<th>95 Pct Conf Int for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rest of World</td>
<td>81</td>
<td>2.1412</td>
<td>1.6061</td>
<td>0.1785</td>
<td>1.7861 to 2.4964</td>
</tr>
<tr>
<td>USA</td>
<td>65</td>
<td>2.2705</td>
<td>2.0457</td>
<td>0.2537</td>
<td>1.7636 to 2.7774</td>
</tr>
<tr>
<td>Total</td>
<td>146</td>
<td>2.1988</td>
<td>1.8096</td>
<td>0.1498</td>
<td>1.9028 to 2.4948</td>
</tr>
</tbody>
</table>

Although the above results are preliminary at present, increasing usage of the service will provide for a greater level of data and thus accuracy of results in the future. In addition, this will facilitate an enhanced micro-level of analysis where it will be possible to employ the data to address more and more specific and specialised research questions. For example, a greater number of card providers and a greater number of countries.

### 5.4. Case Summary

For the financial service provider there are a number of advantages to using this new channel of communication, all of which combine to both lower the cost of market research and yet to increase its usefulness. Once a customer database has been built up based on the use of a suite of complimentary services, it becomes possible to access real-time market data to build up a greater understanding of a market. This is an important development upon more traditional models of marketing as it introduces a line of communication with a potential customer prior to a greater commitment of resources in the development of services. In addition to its impact on the methodological approach to marketing research, the introduction of the WWW has wholesale implications across the discipline of marketing, for example, the collapsing the new product development process [26].
6. Conclusions

The present paper demonstrates how developments in IT and the WWW are leading to a re-evaluation of existing best practice in the field of marketing research. Our contention, which is supported by the case material, is that we are presently entering a third phase of marketing research. Furthermore, developments in IT and the WWW are providing companies with the opportunity to re-examine the way in which they generate, handle and analyse marketing information, not only in terms of internal data, but now external primary data as well. The case demonstrates that Xenon, by adopting an innovative methodological approach, has been able to collect data which would have been very costly, time consuming or simply not available with the use of a more traditional approach to marketing research. It is the identification and development of a customer base, via a strategy of offering complementary WWW based services, which has been a key element of this new approach. In addition, by not employing a questionnaire-based methodology, Xenon has demonstrated the feasibility of conducting marketing research using a non-intrusive research vehicle.

References

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