

# Innovation within B2B Research: Exploiting Internet ASP Surveys

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## **Introduction**

In the last few years there was strong rise in the attention for and implementation of different web surveys. Recently, a new kind of web survey has been given special attention, namely the web survey solution based on the application service provider model. This model is also known as the ASP model. In this paper we will focus on the 'do-it-yourself'-surveys based on this ASP concept. This means we will not look at the internally hosted 'do-it-yourself'-survey. In this research paper we will give you a short and practical overview of this new kind of web survey. One web survey case from Canon Europe will be discussed in this respect, followed by an Internet ASP survey case study for short comparison. Both cases will include a simple financial analysis. Finally, we will give you an outlook for the Internet ASP surveys and how it relates to customer relationship management (CRM) systems. In this respect we will discuss issues like how this integration with alleviate some market research challenges, how it will change the relationship between market research agencies and customers. A key focus will be on the details of current middleware and web services technologies.

## **Goals of paper**

- To give a short and practical overview of Internet ASP surveys
- To give a short overview of the issues surrounding the integration of Internet ASP surveys with CRM systems

## **Internet ASP Surveys**

Internet ASP surveys can be defined as follows: survey software hosted on an external web server where the customer can control the complete research process him- or herself. Customers rent the use of the application and access it over the Internet or via a private line connection. With the advent of the Web browser as the universal client interface, the ASP market is expected to grow rapidly. We will focus on the do-it-yourself-surveys within this model.

An alternative to an Internet ASP survey is a home-grown web survey solution with for example a Microsoft Access database. Although the initial costs of the home-grown approach may be relatively low, managing and modifying these surveys over time is extremely cumbersome. For example, if a customer uses an Internet ASP survey solution and needs to change a question from a

single-select to multiple select, the change takes less than 20 seconds. If a customer has created their own HTML survey and back-end database, that change would take about an hour to implement. If the customer has already launched his or her web survey, this time delay means that much of the data he or she collects during that time may be invalid. Another downside to home-grown solutions is how time consuming it is to analyze and report on results. If the customer receives responses by e-mail, he or she has to extract the answers, tabulate them in a spreadsheet program, then manipulate the data to get survey results. By having the data automatically entered into the database program, the customer eliminates the time he or she would spend tabulating responses, but data manipulation still requires significant time and expertise.

In the following paragraphs the users, usage, features, benefits, process and risks of Internet ASP surveys will be discussed briefly.

## **Users**

Internet ASP surveys are used by people from different functional backgrounds within companies:

- HRM managers
- e-Commerce managers
- Marketing managers
- CRM managers
- Webmasters
- Sales managers
- Service and customer contact managers
- Market research managers

## **Survey usage**

Generally, Internet ASP surveys are used for relatively short, simple and predominantly ad hoc surveys. For large customers, Internet ASP surveys can be a cost-efficient way to implement different short surveys within a fixed fee annual budget. This allows for cost advantages as well as flexibility. For small and medium sized companies, Internet ASP surveys can be an easy, timely and cost-efficient way to do a survey.

Internet ASP surveys can be used for the following survey types:

- Customer satisfaction or attitude
- Customer profiling
- Lost sales analysis
- Product concept testing
- Competitive analysis
- Corporate image tracking
- Employee satisfaction or attitude
- Salary survey
- (Online) Seminar or training evaluation
- Organizational changes
- Knowledge mapping

- Website evaluation
- Online marketing campaign evaluation
- Online demographic study
- Shopping cart abandonment
- Political polling
- Patient satisfaction
- Partner/reseller satisfaction

## **Features**

The following key features of Internet ASP surveys can be distinguished:

- Own look and feel (logo's, images, colors, font etc.)
- Library function for questionnaires and questions
- Integrated software (questionnaire creation, data collection and data analysis)
- Security for respondent lists, surveys and data
- Ease of integration with other databases
- Scalability in managers, surveys and completes
- Simultaneous surveys
- Real time

## **Benefits**

### *Lower costs*

Especially in the current difficult market environment, market research customers are looking for more economical research solutions. A typical web survey by e-mail invitation costs about half of a traditional mailed paper survey.

### *Effectiveness*

Recent research within NIPO (2002) about declining response rates could have certain implications for web surveys. More than half (54%) of respondents said they had been too busy or the time had been inconvenient, while 11% had been turned off by being told the length of the interview and 9% had simply not felt in the mood to be questioned. When asked if they would co-operate if called at another time, 52% of previous non-respondents said they would.

Interestingly, the above mentioned resistances among respondents can be alleviated or eliminated by using web surveys, including Internet ASP surveys. This explains why the response rate of Internet ASP surveys generally is higher than CATI and CAPI surveys, especially in case e-mail invitations are sent to respondents. Generally, the response rates are around 35 percent which is higher than the average CATI or CAPI survey.

### *Minimum of startup costs and training*

Due to the nature of ASPs in general, the startup costs are low. The customers do not have to pay for the IT infrastructure. Furthermore, the ease

of use of setting up Internet ASP surveys is relatively high. As a result, the need for training is low.

### *Accuracy*

Due to the fact that the respondents fill in the answers themselves the error rate will be lower relative to CAPI or CATI situations where the interviewer is responsible for the data entry. This is especially the case with open-ended questions where you can capture your target audience's thoughts. Additionally, research shows that respondents generally tend to be more honest and open in web surveys relative to CAPI and CATI.

### *Speed*

The time for setting up the whole web survey project is minimal relative to CATI or CAPI projects and normal web surveys. Additionally, the majority of responses are back in less than a week (usually sooner within 2 days). Finally, analysis can be virtually instantaneous.

### *Control*

Customers are able to manage the whole research process themselves.

### *Transparency*

The survey results can be monitored by users in real time. Normally, this results in better actionability of survey results.

### *Convenience for both surveyor and respondent*

They can use a library with specific questions, parts of questionnaires, complete questionnaires and specific look and feel templates. Respondents are more likely to fill in questionnaires as they can determine the timing of the survey.

## **Survey Process**

### *Creating the questionnaire*

- Using questionnaire and question templates from library
- Language selection
- No HTML knowledge is required

### *Configuration of the survey*

- Defining online reports

### *Testing*

- Compile test database
- Generate test web interview
- Generate dummy data

*Selection and upload of e-mail addresses (list management) of respondents*

*Put link on your website or send the questionnaire by e-mail to respondents*

*Respondent clicks on link in e-mail or on link in website*

*Respondent fills in survey on the web server of the survey ASP vendor*

*Bounce management*

- Soft bounce (temporary unavailability of e-mail address)
- Hard bounce (structurally unavailability of e-mail addresses)
- Unsubscribe (respondent can remove his or her e-mail address from list)

*Sending of e-mail reminder(s)*

*Progress reports (access by username and password)*

*Tabulations*

*Publishing online reports*

*Exporting online reports*

*Distribution of survey results to relevant people*

*Survey analysis*

*Feed into other databases or CRM database*

## **Risks**

- Representativeness of respondents
- Too many surveys for particular respondents within certain timeframe
- Possibility of lower quality survey design
- Unorganised user permissions for the ASP software
- No centralized control in multi-language environment

## Web Survey Case (PSV): Canon Europe

In this paragraph a short case study from Canon Europe called PSV will be presented. This is a generic web survey case in which NIPO Software did the hosting of the web server. The key goals within this project were to decrease the total costs of doing research as well as increase the speed of implementation. The number of respondents was 25.000. The response rate for this survey was around 30 percent.

### Financial analysis

The total costs for this project were 45.000 euros. This means the cost per complete was  $45.000 \text{ euros} / 25.000 = 1,8 \text{ euro}$ .

From the total costs, 10.000 euros was for hosting costs and 35.000 for project management. The latter costs are split in Figure 1 below.

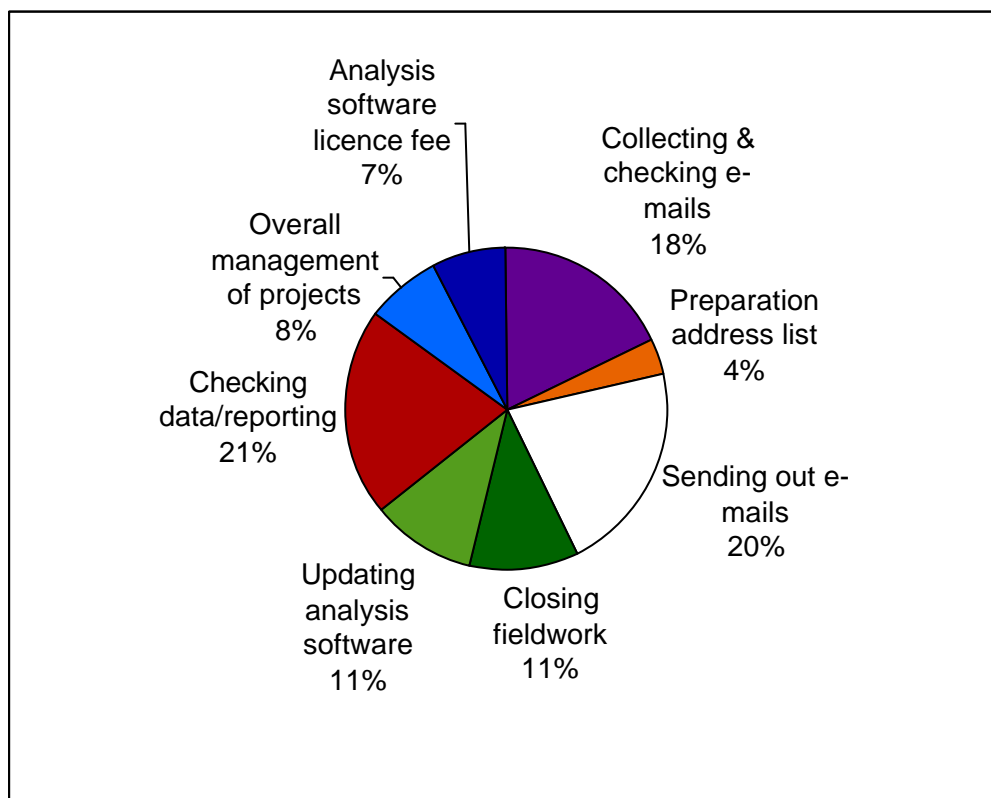


Figure 1: Cost split of project management of typical web survey within Canon Europe (2002)

Traditionally, this project was done using a paper survey. The total costs for the paper survey were 250.000 euros. This means the average cost per complete in that case was around 10 euro. Besides being more expensive the paper survey was too slow in processing.

As a comparison, a corresponding CATI survey would cost around 375.000 euros which means the average cost per complete would be 15 euro. Also, the processing time would be longer relative to the web survey.

The above comparisons clearly show why the web survey solution was chosen in this project.

### **Internet ASP Survey Case (Fotango): Canon Europe**

In this paragraph a short case study from Canon Europe called Fotango will be presented. This is an Internet ASP survey case. The key goals within this project were to lower costs, increase the control of the survey process and increase the speed of implementation. The number of respondents was 1.990.

Total costs were around 9.000 euros. This means that the average cost per complete was 4,5 euro. In comparison with the web survey case study within Canon Europe this means the average cost per complete was 2,5 times higher. However, it should be noted that this amount could be much lower. As the Internet ASP survey deal was a fixed fee deal, the number of projects and completes had a strong influence on the average cost per complete. More importantly, the Internet ASP survey had only 1.990 completes while the normal web survey had 25.000 completes. The latter amount lowers the average cost per complete.

## **Internet ASP Survey and CRM**

Recently, some users of Internet ASP surveys have implemented a direct connection between the results of these surveys and their CRM system. The benefits of this connection can be summarized as follows:

- Lower costs (automated instead of manual workflow)
- Higher revenue per customer
- Higher customer retention

One of the key advantages of integrating Internet ASP survey results with CRM databases is that actionable data is delivered directly to the person most equipped to deal with any complaint.

In the paragraphs below we will focus on how integration of Internet ASP surveys with CRM can alleviate some broad market research concerns at this moment. Furthermore, the effects of the advent of Internet ASP surveys on the roles of market research agencies and market research managers within customer organisations will be discussed briefly. Finally, a short overview of different technical methods used for integrating CRM with Internet ASP surveys will be presented.

### **Integration as Solution to Challenges**

Currently, market research agencies face different challenges.

First, market research has generally become tactical, it is often never seen by senior management. Considering the fact that CRM is still among the top priorities among CEOs today, the integration of market research within CRM might increase the visibility and importance of market research, including Internet ASP surveys.

Second, custom or ad hoc research is so heavily project-based that it ignores both the key business issues and any previous learning that the company has gathered in the past. This is solved by connecting market research with CRM. Third, continuous research has become so process-driven that it might cease to add real value. Internet ASP surveys can be ad hoc and event-driven. This kind of research can add more value and trigger timely and targeted campaign and content management.

Fourth, innovation in recent years has been technological. The development of the Internet has been great in terms of conducting research rapidly and disseminating it over a wider audience. But there has been little innovation in integrating learning and information. Connection between CRM and Internet ASP surveys will be a good start for learning and enriched customer information.

Fifth, market research has become its own self-contained discipline and, as such, even further removed from real time decision-making. CRM is used increasingly for real time decision making, even though only a few companies at this moment are able to integrate all the different databases for real-time analytics and decision making.

The above overview shows that the integration of market research in general and Internet ASP surveys in particular with CRM could alleviate five of the current concerns surrounding the market research practice.

## Roles

Currently, there is confusion in the marketplace as to what the new role of market research will be. The market research industry is falling behind and different consultancy agencies and CRM companies are entering the marketplace. Most market research agencies have misunderstood the real nature of CRM and have therefore missed opportunities to cash in on the CRM boom. Market research agencies have mostly assumed a defensive posture with regards to CRM because they are not technologically savvy. It has been suggested that if market researchers do not find a way of breaking into the CRM scene they will become increasingly sidelined.

Just as market research agencies have devised services to track brands, products, customer service and channels, they need to stand back and think what it is that companies are trying to achieve with CRM. In most cases, these services won't be new, as CRM is after all just a recombination of well-understood marketing, sales and service disciplines. However, agencies need to adapt to the CRM reality. This means that services such as those offered to companies in terms of tracking *ownership* of products will become more important and will be focused on the relationship agenda.

The question remains whether companies would do a better job of managing customers if more researchers in both agencies and client research departments were involved in the CRM project? Often one of the weakest parts of CRM is the company's failure to understand the experience they and their competitors put their customers through, from the beginning to end of the supposed relationship. This is not normally visible in the data held on CRM or related systems. This is what market research agencies should be asking to provide, but in ways that fit with CRM strategies. In practice, this boils down to providing the more relationship-oriented and psychological data to the CRM database. Examples are the customer attitudes, purchase intentions and recommendation behaviour. Additionally, knowing what all customers think or how satisfied they are is usually less relevant than knowing about the thoughts and feelings of customers who are high value, new, buying more or leaving. In sum, Internet ASP surveys are suitable for doing event driven research as well as for collecting relationship-oriented and psychological data among customers.

Do researchers need to learn more about computer software in order to get involved? Market research agencies don't need to know about the CRM software itself. They need to understand in much greater depth what companies are trying to do in improving how they manage their customers and how research techniques can help them do so. In what ways can market research skills be used to enhance or repair the failings of existing CRM systems? This is already happening. Some market research agencies have identified that feedback from customers after particular events or during particular stages of the relationship is very important, so they are offering services that allow companies to get feedback much more quickly than they once did. Internet ASP surveys are an effective method in this respect.

Is it likely that CRM specialist companies will either hire market researchers or acquire research subsidiaries? Yes, although acquisition seems less likely due to the different nature of market research agencies and CRM companies. Customers who have an advanced CRM system in place that combines customer databases, customer questionnaires, market research and other sources and with a strong reporting and analysis capability to derive results, are usually strongest when it comes to understanding their customers. But they all use research agencies increasingly to provide the qualitative perspective or for the deeper quantitative work. Therefore, it is likely that in the future there will be a deepening of the relationships between database marketing analysts, CRM managers and market research managers on the client side and the market research agency project leaders and market research software vendors (eg., Internet ASP survey technology).

## **Middleware**

Middleware can be used for integrating different systems. Middleware basically is about messaging and interfaces. There exists four key middleware types: CORBA, COM/DCOM and web services like J2EE and .NET. Each type of middleware fits best to a specific environment. CORBA and COM/DCOM are the oldest type of middleware and have been around since 1990. Web services is the latest middleware concept which has not been around for long.

### **CORBA**

CORBA is a hyper-flexible kind of middleware which is at its best integrating legacy-systems and building critical systems that are robust, scalable and real-time. CORBA could be used almost anywhere. The drawback of this hyper-flexible nature is that it can be cumbersome to program with CORBA.

### **COM/DCOM**

COM/DCOM is Microsoft's version of middleware and is very similar to CORBA. What COM offers is programming language independence but Windows dependence. Easy to use in Windows environment, difficult to use elsewhere. Interoperability with distributed objects residing in other operating systems is possible to some extent.

### **Web Services**

Besides COM, Microsoft is a key player in the Web services world with their new .NET architecture. .NET is a sort of "web enabler" for COM- and other Windows based applications. Web services is a new generation of middleware build on the XML-technology. Key examples of web services are Microsoft .NET and SUN's J2EE. J2EE shows many similarities with CORBA but it is "pure-Java" and much easier to program. **EX**tensible **M**arkup **L**anguage (XML) is defined as an open standard for

describing data. It allows web pages to function like database records. By providing a common method for identifying data, XML supports business-to-business transactions, data and application integration. One of the keys to web services is the XML-based messaging protocol called SOAP (Simple Object Access Protocol). A protocol perfectly fitted for the Internet. SOAP seems very promising and offers many great features which cannot be matched in other technologies. SOAP as well as XML shows many encouraging signs. Both are evolutionary, simple, demand-driven, backed by many key organizations (both commercial and non-commercial) and people usually like it from the first time they try it.

SOAP does not necessarily compete with technical superiority but with offering just the few things that matter. As a technology is it not yet advanced or well tested. It is even primitive in many ways.

The use of XML places a heavy burden on your system. Despite the relative simplicity of XML, there are huge memory and CPU requirements compared to other solutions. Generating and parsing XML documents is a time consuming task that also needs a lot of memory compared to the actual data that is in those documents. Complex schema's slow down the processing of the structure and content of the document even more. Furthermore, XML documents have to travel across the network. In a high throughput system, the sheer volume of the XML data that has to travel over the wire may be too much (with XML the actual information is only a small portion of the total data; there is a high overhead). Various people report that SOAP performance can be bad and that the wasted memory and network bandwidth is enormous. However, it is likely that both issues are temporary problems due to the rise in bandwidth and processing power.

### **Comparison of Middleware**

So how does SOAP and Web services compare to the other middleware technologies? You use SOAP to integrate the existing middleware via the Web and at the same time provide room for completely new kind of middleware to emerge. SOAP is extremely good at simple integration. Many services offered via Web (at the moment and at the near future) are very simple client-server scenarios.

Web services are basically a reinvention of the CORBA wheel but lacking standard services like security, transaction, notification and support for inter-organizational policy management. It is a hard process to re-invent and re-implement all these services again. Not to mention that after so many years, even traditional middleware like CORBA can't provide smooth infrastructure level interoperability in all aspects.

So what to do? Organisations that rely on the Windows platform, use COM/DCOM/COM+ or .NET technology. Companies that don't support Microsoft and have Java as their key language, use Java-middleware. Depending on your field of operation it might be J2EE for enterprise services, J2SE for desktop services and J2ME for mobile services. Java provides a fun-to-program language and a very capable environment suitable for very different needs ranging from large enterprise servers to

PDA's and smart phones. Java-middleware is more advanced and robust relative to .NET. However, .NET applications and services are more cost-efficient, simple and more integrated with Windows.

Companies that don't use Java and Microsoft technologies, use CORBA. CORBA swims smoothly with and without Java and often the combination of pure-Java middleware and other CORBA-based middleware is an interesting solution. If an organization operates under very critical conditions like in real-time, extremely large systems with guaranteed up-time and reliability, CORBA is your choice. CORBA is tested in banking, command and control systems, and telecommunication systems and it is robust.

## **Conclusions**

- Internet ASP surveys are a viable and growing market research concept
- Integration of survey results from survey ASP solutions directly into CRM databases deliver marketing and sales results
- As a result, market research agencies can play a new role within CRM savvy customers. These customers all use research agencies increasingly to provide the qualitative perspective or for the deeper quantitative work. As Internet ASP surveys will be catalyst for empowering customers to do more research themselves, these new roles will become more pronounced in the years to come.
- It is likely that in the future there will be a deepening of the relationships between on the one hand database marketing analysts, CRM managers and market research managers on the client side and the market research agency project leaders and market research software vendors (eg., Internet ASP survey technology) on the other hand.
- Different software methods of integrating Internet ASP survey results within CRM systems exist at this point. The choice for a particular middleware solution depends on the nature of legacy systems, operating systems as well as programming languages used. In most cases, web services like Microsoft .NET will be best positioned for integrating Internet survey ASP results with a CRM database. The main reason is that the complexity of this kind of integration generally is low and the need for added services is less pronounced relative to web services aimed at the external marketplace.