OCCASIONAL PAPERS FOR MARKETING
RESEARCH PRACTITIONERS

Software choices: At the start of the journey

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Contents

1 Start of the journey

Your situation is this: you need a new interviewing system or a replacement tab package because the one you are using is old hat and not really cutting it anymore. So you ask three firms to present their offerings before the great and good of your organisation.

The salesman from company A turns out to be the author of the software, and takes you on a grand tour of every option and feature, from A to Z. It gets so theoretical that only the head of IT seems to understand what is going on. For two hours you are confronted with everything the program can do, but don't see it do anything. Everyone - apart from the head of IT - feels the software is far too difficult for them to use, so it's rejected and company A is shown the door.

Company B starts off well, actually using the software to set up a project from scratch, and even uses an example of one of your projects found on the internet. The salesman is a friendly, helpful chap who does the support when he is not doing sales demos. However, he gets bogged down over a minor requirement someone thinks they may have in the future.

Support man struggles to find a way to get it to work despite trying several different approaches. Eventually he gives up, making it clear he thinks your requirement is a bit daft. Suddenly, there are ten minutes left to cover everything else. The group is unimpressed. Now, everything hangs on company C.

Company C is a much bigger outfit than the others, and it has sent a senior sales manger and someone called a 'business development manager'. One runs the PowerPoint and the other works the software. It is an impressive demo from an impressive duo. The software seems to cover everything - it certainly has lots of nice features. The team start to smile at one-another. Questions are answered confidently. The MD is impressed with the client list. It is a pity it costs twice as much as company B and three time as much as company A.

1.1 So, who's got it?

So often, software sales pitches can leave you none the wiser. I certainly would not choose company C on the strength of their showing, though I would probably struggle to convince the group that they should really take a second look at companies A or B. To get it right, you need to start your planning well before you ask anyone to come in and give a pitch. To get some practical insights on how to make software pitches work for the buyer, I sought out the advice of Jon Hulbert at Maritz Research and Muriel Bankhead at SkillsActive UK, as they have both recently gone through the process of choosing software for their respective organisations. Both, independently, stressed the need to work to your list of requirements and to set the demo agenda to avoid getting blown off course, or simply bamboozled.

1.2 Skills for everyone

Muriel Bankhead is Head of Research and Information at SkillsActive UK, the Sector Skills council responsible for promoting the development of skills and training in the active leisure and learning sector. An experienced clientside

researcher, she was seeking a general-purpose research tool for her 4-strong in-house research team. They conduct around 25 surveys a year.

Muriel sees the odds loaded against the would-be purchaser to remain objective. She observes: "People often come in with their own pre-rehearsed demos and the real challenge is to make sure they have answered all your questions. It is so easy to lose sight of your requirements when you are concentrating on keeping up to speed with what they are showing you. The way it is demonstrated can be extremely persuasive and that can be a major benefit for the software providers. If they have the right salesman and a slick presentation they have probably got a better than average chance of persuading you to buy it, irrespective of its quality and suitability for the purpose."

"The downside of this is that you might end up with a system that is not suitable because you have bought the salesman - or not bought the salesman. Either is just as bad."

Muriel cautions against taking too much of a leap of faith that the software will probably do what you want. You need to verify as much as you can before you buy. In fact, the SkillsActive team managed to identify several important deficiencies in the solutions they rejected, which would not have been apparent had they not defined their requirements in advance, and if one member of her team had not spent time, outside of the pitches, going through the demo software to get it to actually do what the suppliers claimed it would.

"It is important to have the discipline to sit down beforehand to work out what your requirements are. If you can, find an expert to advise you - this could be an expert from within your company."

1.3 Pitching to the pitchers

Jon Hulbert is system delivery manager at Maritz Research, a global research agency. He was in the market for a particular data collection solution that would satisfy a cross-departmental group of around 30 execs and operational managers.

For Jon, the cornerstone of success in choosing software is to have a good, systematic process that can be seen by all stakeholders to be fair. "Bringing in a lot of different stakeholders certainly involves careful managing," he states, "and it's possible for the scope of the project to start to creep right there. This can be managed by drawing up very clear agendas and having quite firm chairing of the meetings."

Jon chose to work with an outside consultant to identify aspects of the project that were difficult to handle internally. He comments: "It lends objectivity to the whole project to have an unbiased outside person supporting the process. The long term success of the project depends on the overall acceptability of the decision you reach."

Having an outsider involved also helped to drive the project forward. "When projects like these arise they tend to be workload that is in addition to your day job. Once you have engaged someone from outside you are able to follow the process through, and reach a positive decision with all expediency. For Jon, the key to receiving an informative software demo is "a realistic scenario to work to as a case study. It is important to set some hurdles for the vendors that should be from real situations and real requirements. It is important to set realistic scenarios for them to demonstrate so that they are not just running through their prepared demonstration, as that gives them scope to smooth over all sorts of things."

In Maritz' case, this strategy proved to be highly revealing. A process which all the suppliers said they could do was examined carefully in the demos. In one demo, it

turned out to be a complicated process, and in another, the solution proposed was unworkable.

The software Maritz was viewing was far too complex to download as a demo disk, so the evaluation had to be done with the vendor presenting the software, which gives more scope for glossing over the missing features. To avoid this, Jon suggests introducing some interactivity into the demo, "Pose questions to the supplier during the demo," he suggests. "Introduce some subtle changes to the scenario and make sure they show you what happens when you do this. But it is very difficult to police this area. A clever sales pitch built on slideware will look very much like real software."

Even after the demos picked a conclusive winner, there were still questions from the stakeholders that had not been answered definitively.

"So that led us, once we had selected a preferred supplier, to have them back and interview them in much greater depth about the technical aspects. In fact we spent two days with them: longer than we originally thought. We had a good poke round with the software, and even found that in some cases it did a lot more than we were expecting. I would not have been comfortable knowing we had made the right choice without having the answers to all our questions."

1.4 Received wisdom

Muriel Bankhead also considered that vendors could do more to present their products and be receptive to ideas. She remarks: "They could massively improve the presentation of their products. If the software providers actually rehearsed their demonstrations then I am sure they would be more successful in presenting their products for sale. They could learn even more about their competitive offering if they could persuade a couple of potential clients to tell them what they were missing."

One of the firms she turned down did contact her to seek feedback, and anyone seeking a pitch should be prepared for this. It is a reasonable request, provided the sales person has accepted he or she is not getting your business, and is not still trying to overcome objections. It is worth recording both some positives and negatives on each product during your decision making session, so you can be ready to tell them what you liked as well as what you didn't.

Advice from Muriel Bankhead, SkillsActive UK

- Make sure you have a really disciplined process.
- Do call in an expert to advise you: this could be someone from within your organisation, or an outside specialist.
- Sit down beforehand to work out what your requirements are.
- Find out what other researchers think about software products in practice.
- Take time to install and work though the demo version of the software, if one is available.
- Have a checklist of questions ready for the presentation.
- Check the compatibility of the software with your other systems and find out exactly how it is going to work.
- Check exactly what the price includes, how many licences, users, entitlement to support, upgrades and manuals, all of which may be extra.

Advice from Jon Hulbert, Maritz Research

- Be prepared to put sufficient time into managing the process.
- Ensure you have full commitment from your stakeholders.
- Research the market and make a long list of potential suppliers.
- Draw up a short list of three or four products.
- Invite the short list to pitch.
- Prepare an agenda for the presentation session.
- Have a real case study for your vendors to work on.
- Develop a list of criteria by which to evaluate the demonstrations.
- Be careful that you are not having the wool pulled over your eyes in the presentation. Go back in more detail, as a duty of care, once you have selected a preferred supplier.

2 Before you buy checklist

Buying specialist research software can easily be one of the most costly business decisions you ever make. Though the prospect of shopping for a new CATI system or a web-enabled cross-tab tool may bear little resemblance to your weekly trip to the supermarket, in both cases you are more likely to come out with what you need if you create a list of what you want first. Your powers of memory, intuition and self-discipline alone will be little match for the temptations that will be strewn along your way.

The aim must be, as far as possible, to know everything you can about any product before you buy, so you can be confident it will meet all your current needs, grow to meet new demands and bring no unwelcome surprises when you start to use it. Rarely will you be able to undertake a full trial of the software before you buy it, and even if you could, this approach does little to ensure that you are choosing the tool that is most fit for your purpose. On the other hand, preparing a checklist of your requirements will enable you to quantify the extent to which each software product you look at matches up to your ideal and allow you to compare each product you evaluate on an equal basis. Most people also find that it helps them to refine their own understanding of what they are trying to do and share this knowledge with others in the organisation.

Whether you identify core business needs in your checklist, or go straight for specific software features you are looking for, it takes time and effort to come up with a definitive checklist. It has been my experience that the best requirements lists evolve through several revisions and a lot of consultation. Sometimes, decision makers can be reluctant to involve others in the act of defining a wish list, for fear that a series of mutually incompatible requirements will emerge, rapidly followed by a lot of people throwing their weight about, no overall winner and a resented decision by someone on high, to adopt a system that nobody wants.

In fact, it is this very situation that early involvement of all the people likely to be affected by the new system will help to avoid. It is much easier to get everyone to agree on the requirements, when discussed in the round, ahead of viewing the software, than it is once your people have taken a look at some systems and been wooed by the latest bells and whistles.

One good way to gather checklist candidates in is to hold a brainstorming session and, if yours is a large organisation, invite representatives of each group of users to attend on the basis that a sample is easier to handle than a census. Another alternative is to prepare a list of your own requirements and other requirements you have understood from others, then circulate it for comments, while it is still obviously incomplete. People always find it easier to embellish what is there than to start from scratch.

Bear in mind that these lists can become very long. I have seen over 150 requirements listed on occasion. If you expect a long list, it is worth recording who the ‘owner’ or ‘sponsor’ is of each requirement. That way, when you evaluate the software, you can ask the sponsor to pay particular attention to his or her own items and ensure that all 150 requirements get some attention.

Not that all requirements will be of equal weight or merit. You and your item contributors should grade the requirements by importance. After much

experimentation, I tend to stick to this simple three-point scale, which most people seem able to apply without too much effort: essential, important and nice to have.

Finally, remember that, unlike more tangible purchases, computer software is never finished. You are invariably buying into a work-in-progress, so what matters is not only the features in the software today, but also the direction it is heading in tomorrow. It can sometimes make sense to choose a product that has a decent track record on frequent, substantial updates is what is needed. It is certainly worth putting "software updates" on your checklist, but it may also make it easier to accept a solution that does not tick every box in the important and nice to have categories, provided you are satisfied that it does enough for your essential needs now, and will bring you the rest pretty soon.

2.1 The checklists

To help you get started with your checklists, we offer here our ideas of the top ten to a dozen features of the leading MR solutions for the main data collection methods, analysis and result publishing. Tailor them and extend them to meet your own needs.

2.1.1 Survey authoring (all modes)

1. Graphical user interface for fast drag-and-drop questionnaire design
2. Alternative scripting interface for power users
3. Instant preview of how the question will appear when on screen and/or on paper
4. Easy import of an outline questionnaire from a simple Word document
5. Printable version of the questionnaire, preferably with understandable routing instructions in-line with the texts
6. Multiple languages within the one questionnaire and separate interface for adding translations
7. Support for non-Roman writing systems such as Japanese and Arabic, preferably using the UNICODE standard
8. Question library capabilities
9. Choice of many built-in question types or blocks to facilitate easy creation of questions in grids and batteries
10. Export questionnaire to Word, PDF or plain text.

2.1.2 Computer-assisted interviewing (general)

1. Personalisation of text according to previous answers given.
2. Complex selection logic, routing, randomization and rotations applied to questions and blocks of questions
3. Selection logic applied to individual answers within questions to tailor the list only to those that apply to the respondent.
4. Ability to amend surveys that have gone live, safely
5. Real-time results reporting
6. Export of data with accompanying text and code definitions to triple-s format or SPSS stats package format

2.1.3 Telephone interviewing (CATI)

1. Ability to create your own call-back rules and definitions and set priority ('hard' and 'soft') appointments
2. Quotas, including thrifty quota control when a quota cells is nearly full
3. Web-enabled CATI for distributed interviewing, outworking and remote monitoring and supervision.
4. Telephony integration offering hands-free autodialling, voice recording of open-ends and combined, unobtrusive screen and audio monitoring of interviewers
5. Time zone support to prevent interviews in other countries being called at inappropriate times of the day
6. Transfer of individual interviews between CATI and other modes such as CAWI (multi-mode interviewing)

2.1.4 Web interviewing (CAWI)

1. Completely configurable look-and-feel, controlled by separate templates and stylesheets
2. Automatic or semi-automatic progress bar on screen
3. Quota controls
4. Choice between one- and multiple question (scrolling form) displays within one survey
5. Integrated emailing of invitations and reminders
6. Panel management capabilities

2.1.5 Laptop and handheld interviewing (CAPI)

1. Choice of communication methord, including asynchronous wireless communications via mobile telephony and the Internet
2. Real-time quota controls
3. Intelligent capture of open-ended data, according to the device used
4. Independent (offline) transfer of embedded images and video clips, via CD or DVD, when to large to go via the Internet
5. Ability to reassign interviewers to new projects in the field
6. Long battery life on devices

2.1.6 End-user analysis and cross-tab tools

1. Web enabled (or not)
2. Drag and drop interface to create tables with any number of variables across the top and down the side
3. Ability to create new variables and filters by recoding and combining existing data
4. Integrated charting capabilities for histograms, pie charts etc
5. Cut and paste of tables and charts directly into Microsoft Office tools
6. Good range of descriptive statistics (mean, standard deviation, median etc) and relevant significance tests (Chi^2, t test, F test, Z test)

11. Save or discard tables and charts, and subsequently the option to re-run saved reports against new data
12. Multi-format output, including PDF, Word, Excel, Powerpoint and plain text for import into publication tools like E-tabs or Winyaps
13. Export of subsets of data and variables for internal or external clients to analyse using an analysis tool or output viewer
14. Triple-s import of external data to creates fully annotated variables ready for analysis without any redefinition.

2.1.7 The Provider

1. Stability of the company
2. Support hotline—hours of operation, after hours, weekends.
3. Training
4. Backup for overflow work or crises
5. Track record on upgrades; policy and timetable on future upgrades
6. Extent of development resources, programmers, software engineers
7. Client list
8. Reference sites to visit or contact by phone
9. Does a user group exist? Who runs it?
10. Knowledge in the marketplace of their products; availability of experienced technicians to recruit

3 The future

Four industry leaders spoke to research on the new bounties that technology may be about to bring to research – what is up and coming, and what may be on the way out.

We sought the views of Pat Molloy at Pulse Train, Rickard Kottler from SPSS for the software provider's view and Mike Leigh, at Kantar Operations and David Zotter from GfK NOP, both heavy users of IT that tend to push technology to its limits, to offer the research agency's take on what is just over the horizon.

Pulse Train's Pat Molloy sees a more connected future, though a convergence of a range of technologies: Wireless and Wifi communications, Voice over IP, better standards for exchanging data between systems and greater cooperation between those systems.

"Wireless and Wifi now works," he says. "It is cheap and affordable, and allows us to use all sorts of untethered devices for interviewing." Voice over IP, where normal voice calls are digitised and pass over the same network as data, is also coming of age, he believes. "Companies are now using them around the office, and it makes sense to use this when rewiring CATI booths. And services like Skype mean that people can use this at home."

Provided you have a broadband connection, Skype lets you talk other people over the Internet for free with this piece of freeware installed on their PC. It also provides gateways in different countries to let you call conventional phones too at what is effectively a local call rate. "CATI may be on the decline, but we do not see it plummeting through the floor," says Molloy, who sees VOIP reducing cost for centralised CATI, and particularly distributed CATI with interviewers working from home or satellite call centres.

Software standards will also become more important, according to Molloy. These, combined with greater use of Web services, whereby desktop and enterprise applications exchange data with other systems over the internet without a single web page or web browser in sight, will allow users to jump out of one vendor's software an into another's for specialised capabilities or to access specialist data.

Richard Kottler, at **SPSS**, sees the start of massive automation in the research process, as a result of more open and flexible software enabling developers and in-house programmers to plug the gaps. He says: "We are extending specwriting capabilities into mainstream IT capabilities by giving the scriptwriter tools that are the same as mainstream IT tools like Microsoft Visual Studio. For example, writing tabs and writing PowerPoints then become part of the same technology."

Pat Molloy and Richard Kottler both see mixed methodology surveys, with respondents switching between modes, becoming much more prevalent. For Kottler, key to this, is "making the experience of interviewing a more pleasurable experience for the respondent. One of the many things to do is to enable him to fill out the survey in his chosen method, which means the real mixed modal approach. The trick is to understand the modal effect."

For Kottler, a big change is on the way in the industry's use of textual data. He believes the current methods used on quant studies are not only inefficient in people time, but waste meaning and nuance. He observes: "The more web surveys you do, the richer the data you obtain. Technology is emerging that allows you to understand much more about what people are saying just by analysing the text. It

is already being used heavily outside the survey world and it should be used in research. We are exploring this not just for classification and coding but to analyse textual data in its own right"

Adaptability is the key to the future for **Mike Leigh** at **Kantar Operations**: "Products from software vendors that will support innovation within the organisation, enabling us to plug in other pieces of software or write new pieces of software to support new tricks that do not come out of the box."

For core research process, The Operations Centre has focussed on migrating its work to SPSS Dimensions as a means to achieve consistency across all the different methodologies in the group. For Leigh, Dimensions scores highly in allowing his programmers to innovate in the core research processes and beyond. "If you sit outside of the core research process, there are lots of systems that are supporting other business activities, such as job management, finance and management information. In the absence of integrated systems we have tended to go outside of the MR software arena for these either by building our own systems or by adapting other non-MR specific solutions."

Is this a failure of the MR software suppliers? Some products, such as Nebu, MI Pro and Research Reporter already provide integrated business and financial management capabilities. Leigh looked on this not as a failure, but as a possible opportunity that developers could be taking now.

Echoing Pat Molloy, Mike Leigh is convinced that wireless telephony is poised to make a big impact now. "There has been lots of talk about new devices such as mobile phones. Our work with GPRS found that you could not get the level of performance needed for a live interview, but 3G is a lot better. Once this becomes more prevalent, there are real opportunities to do live connected interviews, remotely."

Being online, remotely, will bring wider reach to another of his firm's initiatives: a tool to match respondents with open surveys which avoids wasting the opportunity to interview someone because they have failed to qualify for a survey. It pulls real-time information on all live surveys, then uses algorithms to determine which survey the respondent should go to, "It is quite sophisticated," adds Leigh "for it has to do this without favouring one particular study and biasing the results."

Leigh concluded "Traditionally the products offered by MR software vendors have supported a linear process focussing on individual projects. Today we require software that breaks out of this mould and allows the management of a complex portfolio of simultaneous projects"

David Zotter at **GfK NOP** sees smarter technology driving forward more intelligent, less wasteful research. Mirroring others' predictions here, he observes: "The vast majority of sample that come to a survey are turned away from the survey, If you keep sending people to closed surveys they are less likely to respond in the future. The largest expense of any survey is simply getting the respondent to the survey." He foresees panels with much better profiling mechanisms, coupled with Mike Leigh's approach to have more than one survey available for the respondent. He also predicts a rise in the use of behaviourally-based panels. "The benefit is in finding difficult to find respondents that would be nearly impossible to find using traditional profiling techniques," he says.

Zotter anticipates a resurgence of behavioural approaches, as researchers start to embrace Webite usability research and also build observational data collection into the background of conventional question-based online surveys. "Usability research has not really been absorbed into market research," he remarks, seeing a place for these methods across a wide swathe of research.

He joins the others in anticipating a big impact from handheld, wireless devices. "We are predicting a large transition in the next 2-3 years," he said. "Especially as tracking mechanisms are included in the devices, so you can know the location or even target the location. Of most interest to me is single source media consumption tracking, where you replace the old school methods of recording behaviour with ones that are capable of tracking print media, radio and TV all on the same device."

Leaping further into the unknown, Zotter has been watching the development of blogs online and the emergence of the wiki. "Blog and 'word-of-mouth mining' will be important," he said. It is something that will rely on the kinds of text mining tools that Richard Kottler described and will blur the distinction between qual, quant and classic desk research. "Some of the information can be much more powerful than regular surveys," he observes, "and there is such an abundance of it available online."

Another blog-related technology is the wiki , which Zotter sees as an ideal platform to project research into the realm of collaborative knowledge management. "A wiki is essentially a knowledge management system where members using the actual application can modify any knowledge that is there or add to it regardless of topic and it also allows better grouping of knowledge so people can more easily find it." The web encyclopaedia Wikipedia is an example of a service that makes use of this approach, and Zotter sees it becoming valuable both internally, within research companies, and externally, to provide clients with a living knowledge base their research.

As for what is on the way out, David Zotter effectively restates what Mike Leigh said about open and extensible systems, which should be good news for Pat Molloy and Richard Kottler and the other promoters of open systems and standards.

"The technologies that remain will be the ones that are the most flexible and open" says Zotter, "A lot of the proprietary systems will be casualties of the mergers and consolidation we are seeing in the research industry, and will probably go away. And a lot more advanced technology will be built on these flexible open architectures."

Richard Kottler is VP Marketing, Survey Applications, at SPSS. Pat Molloy is CEO at Pulse Train. Mike Leigh is MD at Kantar Operations; David Zotter is CTO at GfK NOP World.

Useful links

www.skype.com. Free Voice over IP telephony.

http://en.wikipedia.org/wiki/Main_Page. (See the definition of "wiki")

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