MARKET RESEARCH

Dr Nicola Lewis



Dr Nicola Lewis is an associate member of the Marketing Research Society and is currently working for British Gas Wales where she is responsible for the design and organisation of market research. Her previous experience included market research work for South West Gas and for a research agency in Cardiff. Her specialist subject is office location.

The primary purpose of market research is to provide decision-makers with information to assist them in the decision-making process and to improve the effectiveness of marketing activities. This information is drawn largely from samples: a representative group of people (respondents) provide either factual or attitudinal data which is used to represent the views of the population as a whole.

An interactive technology centre is essentially a product which needs to be marketed both effectively and efficiently. Market research forms an integral part of this marketing. Its use, therefore, should permit the achievement of increased effectiveness and efficiency in the marketing activity.

Market research has been utilised by the Welsh Interactive Science and Technology (S & T) Group in the planning process for an interactive technology centre. It has been used initially to (a) investigate public response to the concept of a Welsh interactive S & T exhibition, and (b) to measure the relative suitability of a variety of proposed names and logo designs for this Welsh exhibition within the wider context of the Group's marketing activities.

This article illustrates the design and results of the research programme, concentrating particularly on the first objective, and also outlines other possible ways in which market research may be utilised in support of an interactive S & T centre.

The initial problem set for the market researchers was to test the acceptability and public response to a number of proposed names for the Welsh interactive S & T centre. Given the expected appeal of this exhibition, 'public' embraces both

adults and children. However, the major problem posed by this research was simply that a Welsh interactive S & T exhibition did not exist and it was predicted that public awareness of this type of centre would be low.

Clearly it would be necessary to provide respondents with a description of the envisaged centre and its contents in order to test the suitability and acceptability of any name. This offered the ideal opportunity to test public reaction to the concept of interactive centres, without the overt influence of existing centres and, as a result, to respond to public expectation of such a centre in the details of its design and subsequent marketing.

Programme details

The market research programme conducted on behalf of the Welsh Interactive S & T Group thus undertook to fulfill the following research objectives:

- 1 To ascertain the reactions of both adults and children to the concept of a Welsh interactive S & T exhibition centre.
- 2 To investigate both adults' and children's expectations of such an exhibition.
- 3 To gauge the potential appeal of such an exhibition.
- 4 To measure public reaction to proposed names for this exhibition.

A two-fold approach was designed, consisting of (a) research amongst the young adult/parent group, and (b) research amongst children, in support of the adult research. These used two very different research techniques: the adults' views were investigated via a quantitative hall test and the children's views through qualitative group discussions. Details of these techniques and reasons for their choice are described below.

Hall test

The adult research was conducted using a hall test technique: members of the target population are invited to enter a 'hall' at a central location. This hall is used to display a variety of materials illustrating the subject of the research.

In this case the target population was adults aged 16-54 and was selected to include those sections of the general public to whom the centre itself is designed to appeal: young adults and those likely to be in the parent group. An initial quota was set to reflect the age, sex and socio-economic group profile of the Welsh population within this age range.

The location used was at a major hotel in central Cardiff in close proximity to the planned location for a pilot exhibition. The materials consisted of written descriptions and photographic displays designed to evoke increasing understanding of the content and purpose of an interactive technology exhibition by respondents.

Interviews themselves were conducted by experienced market research interviewers using a fully structured questionnaire or schedule. Interviews thus followed a predetermined sequence:

- 1 The idea of a Welsh interactive science and technology centre was described to each respondent at an interviewing table and the respondent was given a descriptive card to read.
- 2 Respondents were shown the first display of black and white pictures of exhibits at existing exhibition centres.
- 3 Respondents were shown the second display of more detailed black and white and colour photographs of exhibits.
- 4 Respondents returned to the interviewing table and were asked a series of questions using show cards (a list of possible answers printed on card).
- 5 Respondents were shown a display of proposed names and designs.

Specific questions were directed at respondents during each of these phases and all spontaneous comments made in response to the display materials were recorded verbatim. Questions embraced the following topics:

- 1 What do you expect to find at the Welsh interactive S & T centre?
- 2 How does and interactive centre compare with other museums/exhibitions?
- 3 How appealing is the idea of visiting such a centre?
- 4 How interested are you in such a centre?
- 5 What particularly would interest you?
- 6 How would children react to such a centre?

The sequence of questions asked during the hall test was governed largely by the need to establish a benchmark of knowledge about the content and activities at interactive S & T centres. Respondents were provided with progressively greater detail about such centres and their responses registered at each stage so that a detailed image was created of

response to the concept. Questions relating to the proposed names were not asked until each respondent had formed his/her own image of the concept. Each interview lasted some 20-30 minutes.

Why was a hall test chosen as the appropriate method? This method offered a number of benefits, not least because of the need to provide illustrative material in an effective way. The main benefits of the hall test were:

- 1 Each respondent is asked the same questions in the same sequence and is exposed to identical display material: results therefore are fully comparative among respondents.
- 2 Each respondent gives his/her replies independently, without being influenced by others' replies.
- 3 The total number of respondents is large enough to permit quantitative assessment of the results and the findings may be generalised for the target population as a whole.

Group discussions

Group discussions are held with, usually, six to ten persons, who are invited to take part as representatives of a selected target group. The course of the discussion is directed by a moderator, working to an agreed topic guide. The various items or topics of discussion are not necessarily covered in a pre-set order, but the moderator's role is to stimulate and encourage open discussion, to ensure that all viewpoints are expressed and to ensure that each of the pre-selected items for discussion are covered by the group. The discussion is tape-recorded so that transcription and analysis is possible later.

This type of research is qualitative. The sample sizes involved are too small to ensure that the results are fully representative of the target group. However, its combination with other quantitative techniques allows this method to provide valuable insight into opinions held within the target population.

In this example of the Wales Interactive S & T Group's research the selected target groups were children aged 9-11 and 14-15. Two group discussions were held with children of both sexes. These were moderated by a qualitative market researcher specialising in child research.

During the discussions the children were presented with the display materials used in the hall test.

The main benefits of this technique were:

- 1 Children are highly creative and imaginative and this is well expressed when children interact. The group discussion format encourages this and their ideas develop in response to each other.
- 2 Children are very open in their criticisms and are less likely than adults to be influenced by their peer group within an informal situation.
- 3 It is possible to react to the responses of group participants in the course of the discussion. This is not possible using a fully structured questionnaire format.

In this particular research programme it was possible to combine the results of these two techniques. Together the results provide a comprehensive picture of the opinions of adults and children.

Summary of results

Some of the results of this research are, of course, relevant only to the Welsh Interactive S & T Group, but many of the broad findings will be of interest to a wider audience with interest in S & T centres.

- 1 Initially, respondents expected interactive S & T centres to be more technically advanced than they are, with expectations of computers, space-age exhibits and modern inventions. Children in particular expected to see machinery and industrial exhibits.
- 2 Once they had seen all the presentation material most respondents gained a perceptive and balanced view of the interactive technology concept, although some continued to view it as very modern or futuristic.
- 3 Respondents very quickly embraced the idea that exhibits could be touched and that participation with exhibits and displays is an integral part of the interactive technology experience. This expectation grew with increasing knowledge about the centre and became the main reason for interest in such an exhibition.
- 4 Children were immediately aware of such an exhibition's educational merit but adults developed this idea rather more slowly. It is strongly linked with the recognition of the exhibition's appeal to children, which was not immediately apparent to adults.
- 5 Adults and children alike quickly assimilated the fun and enjoyment aspect of interactive technology centres. This is largely attributed to the 'interactive' aspect.
- 6 In general, interactive science and technology centres

compare favourably with traditional museums, whilst fundamental conceptual differences may be identified between them. Not least of these is the cultural, historical focus of museums which is conspicuously absent from interactive science and technology centres.

7 Overall, the interactive S & T centre concept was favourably received and very popular. The essential features of such a centre and its primary advantages – in the public's view – are:

You can touch things – it is tactile You can experiment – it is interactive It is fun and enjoyable – for all the family It is up-to-date It is educational – especially for children

In fulfilling its objectives, the Welsh Interactive S&T Group's market research has provided considerable information about how the public respond to the concept of a Welsh interactive centre which may be utilised in its marketing activities.

It has not, and cannot, provide the perfect name for a centre. In reality, there is probably no such thing as the 'perfect name'. Choice is always limited to those names put forward for consideration. However, the key to success is the direct association of the name with the product: the communicative power of a name is important in terms of its associations. It is for this reason that the research examined both people's expectations of an interactive science and technology centre and the 'mental pictures' created by a number of suggested names. Similarly, the research investigated the images created by the key words which might be incorporated into the name: for example, science, technology, physics and energy – words associated with the centre's content; and museum, exhibition, centre – words which classify the place.

It is also useful to undertake comparative testing with 'competitive products'. Thus in later research the suitability of suggested names were tested against an existing name (The Exploratory, Bristol). In theory, any new name should score at least as well as any existing name for a particular 'product'.

It should be remembered too that preferences change over time; the favoured name now may not be the most favourable name in a few years' time.

Fifteen names were tested specifically in the initial research although many others were considered. These fifteen names, in order of popularity amongst adults (and starting with the most popular) were: Active Science, Funtech, Technidrome, Funfizics, Tapping Technology, Science Scene, Funergy, Techniquest, Simple Science, Energy Exploration, Elemental Energy, Energise, Ffisifact, Chwyltech (Welsh version of Techniquest) and Finding Physics. Of these, four names were presented as full logo designs: Funtech, Technidrome, Techniquest and Chwyltech.

The children's opinion of the names were very similar with the exception of 'Funtech' which children found 'patronising' whereas adults considered this name would appeal especially to children!

'Active Science' was the most popular name amongst adults and children and was the only name to be suggested spontaneously by participants in the adult and child research. It was chosen largely for its simplicity: it combines science – viewed as the essential element of the interactive centre – and activity, which conveys the participation with the exhibits

In a related fashion, the logo design which incorporated the elements of both the fun and the serious aspects of the centre was the most popular. Response to these designs provided important guidelines for the revised logo tested in further research, and indeed in the final modifications.

A further hall test was held to assess response to a revised list of names and logo designs developed from the results of the initial market research programme. These were Kaleidoscope, Funtech, Sciencequest, Exploring Science, The Exploratory, Discovering Science, Spectrum, Science in Action, Explorex, Technoquest, Techniquest and Active Science. Again, Active Science was the most popular name over-After initial research it was clear that a single name was unlikely to convey all aspects of the interactive centre (with the possible exception of Active Science). As a consequence, a number of descriptive phrases, designed for use in conjunction with the centre's name were tested in the second research stage. In all, seventeen phrases were tested. Perhaps not surprisingly, 'The Active Science Centre' was the most popular phrase. However, the Interactive Group were anxious to convey the theme of technology as well as science and enjoyment, so that the final phrase chosen for use was a conglomerate of the successful phrases, namely, 'The place to actively enjoy science and technology'.

The final choice of name was Techniquest. This name was favoured by the Interactive Group prior to the research and was adopted despite a number of possible drawbacks highlighted by the research and its lack of overall popularity.

In essence, the Interactive Group chose to use a unique name in preference to an overtly popular name. However, as a result of the research they are aware of the unpopular features of this name which need to be counteracted or overcome (specifically, the mistaken belief that 'techni' is an abbreviation for 'technical' rather than 'technology' and its conveyance of a modern and relatively futuristic 'high tech' impression which is incompatible with the interactive centre concept). Initially these problems have been offset by the descriptive phrase used in conjunction with the name and also through the use of bright colours in the logo design.

As a created name, Techniquest requires considerable reinforcement through exposure/advertising to link the name to the interactive concept in public perception. This is less of a problem than it seems in that the interactive centre itself is a new concept which must be 'sold' to the public. Effective advertising should ensure that Techniquest is indelibly linked with the interactive science and technology concept. Promotional efforts should ensure that eventually Techniquest will mean participative science and fun – and vice versa – as effectively as Heinz means beans.

Only further testing after public exposure to the name and concept will reveal whether or not this has been achieved.

Other possible uses of market research

The market research reported here has been utilised in assessing initial response to the interactive S & T concept and assisting in the choice of a name and logo design for a centre. It has used both quantitative and qualitative techniques. Other possible ways in which market research may be used include:

- 1 Testing visitor reaction to an exhibition (e.g. face to face interviews with visitors as they leave, or self-completion questionnaires distributed to visitors).
- 2 Testing visitor reaction to proposed exhibits, ideally using working models, although it is possible to gauge probable response by discussing concepts only (e.g. group discussions, hall tests).
- 3 Identifying those features of an exhibition/individual exhibits which are particularly liked or disliked and using these to improve the overall appeal of an exhibition (e.g. face to face interviews, self-completion questionnaires, group discussions with visitors).
- 4 Monitoring response to an exhibition over time, so that

improvements may be introduced as necessary before the effects of reduced numbers of visitors or increasing visitor dissatisfaction become evident (e.g. regular interviews with visitors, observation monitoring techniques)

Obviously the use of professional market research involves a cost, but its benefits may themselves provide a cost saving and it undoubtedly provides invaluable information for any marketing activity, including that of interactive science and technology.