

## Extending the Definition of Survey Quality

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In this article, we discuss the elements of survey quality as seen from the point of view of the survey user. We acknowledge that basic qualities of the survey process and quality management within the process are essential. We suggest, however, that more explicit attention might be paid to quality at the interface between supplier and user – where these inherent qualities are delivered – and especially to the quality of relationships at this interface.

*Key words:* Survey quality; relationship management.

### 1. Introduction

This article has evolved from a contribution (Collins and Sykes, 1995) to the International Conference on Survey Measurement and Process Quality. This conference marked a turning point in discussion of survey quality. Seen originally as an update on a 1990 international conference on Measurement Errors in Surveys, the very title of the 1995 conference pointed to major changes of focus over the intervening period: the emphasis on “quality” rather than “errors” and the recognition that all stages of a survey have to be seen as part of a “process” of information generation.

These changes were reflected also in the content of the conference programme and the resulting monograph (Lyberg et al. (eds.), 1997). The primary focus may still be on survey errors but the emphasis has moved from their recognition or estimation towards their management. Several monograph chapters reviewed the application of (TQM) quality standards to survey research (see, for example, Morganstein and Marker, Chapter 21, for a discussion of the principles and value of the approach, and Colledge and March, Chapter 22, for a review of practices in government statistical agencies). Possibly even more striking was a renewed willingness to embrace the concept of “fitness for the purpose” (as opposed to total statistical purity) – an objective acknowledged 50 years earlier by Deming (1944) and raised again by Diplo (Chapter 20) in discussing the evolution of definitions of survey quality.

At the same time, however, the monograph suggests that the world of survey research has not yet reached an equilibrium or an agreed definition of quality. Thus, in consecutive chapters, we find De Leeuw and Collins (Chapter 8) arguing that cost should not be seen merely as a constraint but that cost effectiveness should be recognised as a key element of “quality,” followed by Nicholls, Baker, and Martin (Chapter 9) explicitly discounting cost effectiveness in a review of the impact of technology on survey data quality.

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Despite such disagreements, we must recognise that the monograph shows a move away from a focus on the interests of survey practitioners (“how to do our job rather better”) towards one on the interests of users (“how to deliver the quality needed within the constraints given”). This shift is seen most clearly in the presentation of the U.S. Bureau of Labour Statistics (BLS) quality measurement model by Dippo (Chapter 20) and its reference back to the overriding importance of customer needs in defining quality stressed by Deming (1982).

We see ourselves as merely trying to move this particular agenda further forward. We set out to explore, in an informal way, the aspects or dimensions of survey quality valued by users of survey research. We will suggest that some dimensions deserve more emphasis among suppliers, given an ultimate goal of survey research being accepted and used. We do not claim to be making any startling breakthrough. We are probably talking about aspects of quality most researchers think about and believe they achieve – almost automatically. But these are “soft” aspects of the survey process which might have a higher profile and which need to be made explicit within an overall model of quality and a research agenda. Our thoughts arise from a long period of working with users. The conversion of those thoughts into a speculative article was stimulated by looking at the agenda implied by the programme of the above conference, by a small number of discussions with public sector customers and, most specifically, by the work of others.

## **2. Previous Work**

The previous work by which we have been stimulated includes a survey by Brace and Spackman (1993) of the criteria applied by some 250 market research users in differentiating and choosing between research suppliers. This survey found that users accept that a supplier should have “high quality standards” but that other factors such as timeliness, responsiveness and quality of delivery were seen to be almost as important (and, notably, far more important than value for money).

A second influential contribution was a discussion of market research quality by Callingham and Smith (1994). In discussing the recent development of quality assurance schemes in market research, these authors also point to a move away from a focus on inherent “product” qualities, towards concern with quality in the delivery of the product. In their analysis, they make use of a model of product quality put forward by Levitt (1980).

Levitt’s concern was with product enhancement and differentiation. He distinguished between the “generic” product, the central commodity (which Callingham and Smith equate with “core values” of sound survey methodology and practice); the “expected” product, with certain basic delivery standards added (equated in turn with quality assurance); the “augmented” product, where the buyer is given more – especially in terms of service – than expected or is usually received; and the “potential” product, encompassing other elements of quality that might emerge over time.

All of these authors were concerned essentially with competition between suppliers but most of the concepts involved seem capable of adaptation to a wider context – one which surely should be in all our minds – the “competition” between acceptance and use of survey research, and nonuse. The basic distinction then is between doing research “well” and doing research which engages and is used by our customers.

### 3. Levels of Survey Quality

We have referred above to the seeming acceptance that any search for survey quality should be led by survey purpose; that quality is constrained – or, better, defined – by the resources available; and that survey quality is multidimensional. There is no single measure of achieved quality; and often we have to trade off improvements in some respects with sacrifices in others. It is the third of these basic characteristics – the multidimensionality of survey quality – that we consider. We attempt a loose classification of the many aspects of quality, including those aspects which are softer or more judgemental than others. Our model is derived from Levitt’s thoughts on product differentiation and their development in the market research context by Callingham and Smith.

At the heart of the model (in Figure 1) we have what the latter call “core values” (or the components of what Levitt calls the “generic product”). These are the most basic and production oriented aspects of quality. They are the prerequisites of quality, the sources of quality “potential.”

Within this core, we recognise two types of factor: **resource quality** factors – general qualities associated with the research-supplying organisation, like having a well-trained field force, reputable and experienced research staff, skilled support staff, and so on; and **design quality** factors – those associated with the approach taken to a particular survey, like sample strategy and design or questionnaire development. These core qualities appear in the survey research literature to be the main focus of development effort and quality assessment. There is no denying the importance of these components of quality; but essentially they define only an acceptable “commodity.”

Moving outwards in our model, we find the level we call **process management quality**. This level covers the way in which the application of core qualities is managed in a particular survey – the degree to which the quality potentials are actualised in a particular case. This area of survey quality provides a second focus in the more recent literature, discussing attempts to apply the Total Quality Management concept to survey research.



Fig. 1. Levels of quality

At this second level, survey research is still looking inwards to production values – essential to the quality of the survey process as a whole and recognised as such by users. But users may tend to take such aspects of quality for granted, at least when dealing with “reputable” suppliers. Again, they define the “acceptable.” In choosing between acceptable offerings, users appear to place greater emphasis on factors at the next level of our model – **service delivery quality**.

Here we have in mind a set of factors at the interface between supplier and customer, concerned with reliability of supply and the supplier’s recognition – even anticipation – of and responsiveness to the needs of the customer. It is at this level that the researcher has the opportunity to add worth to an inherently “good” product or, conversely, to spoil it.

As can be seen in Table 1, Brace and Spackman’s survey of user opinions found that users placed emphasis on a number of factors at this level. Only two factors were mentioned by more than half the respondents as being “very important” – the core values embodied in the phrase “high quality standards” are there but so is the service quality of delivering on time.

Moving down to the factors mentioned by more than 30% of users, we find more references to speed and timeliness but also references to softer qualities – interpretation skills, inter-personal relationships and responsiveness. Considerations of cost or “value” are included, but only just.

Our treatment of the Brace and Spackman data in Table 1 is deliberately qualitative: the survey sample was large enough to be reliable but it was confined to UK survey users. Views in other cultures might well be quantitatively rather different but we would be surprised if they suggested radically different qualitative impressions of users’ priorities. The survey included only a few national or local government users and here we have to be even more cautious. Nevertheless, the views of this subgroup (shown separately in the table) are at least suggestive of some differences. “Good value” joins the list of priorities, with the shared values of high quality standards and delivery on time. In the second batch of factors, the other timeliness qualities are still there but are joined by resource considerations that matter less to commercial users. And the softer qualities are gone.

Table 1. Users’ priorities

	All Users	Government Users
Factors mentioned by more than 50%	High quality standards Deliver on time	High quality standards Deliver on time Good value
Factors mentioned by more than 30%	Relevant experience Response to late changes Turn job around quickly Reputation Useful interpretation Previous use Good relationship with researcher Good value Service appropriate to needs	Relevant experience Response to late changes Turn job around quickly Reputation In-house resources Large field force

Further down the list of factors – not shown here – both sets of users value accessibility in the form of good reporting. Commercial users, however, place more emphasis on creative skills – creative analysis, the ability to operationalise a vague brief or solve problems, and giving good presentations.

We would not wish to stress the differences between commercial and government users. They probably say more about role structures than about differing priorities among ultimate users. In government departments, the immediate customer will be a user of outside resources but, in other respects, will see themselves as suppliers, part of the research community. The interface with the final user is in their hands. In business, we are much more likely to be dealing with a user who is firmly part of the marketing or management community. The user looks to buy a service, not a commodity.

For two reasons, we should probably focus on the picture shown by the total user group – mostly nongovernment users. First, our discussions with government “user/suppliers” suggest that their final users share the same priorities as commercial users. Second, as government functions – at least in the UK – become less centralised, we are already seeing different kinds of requests for help, coming from buyers who are not themselves research trained.

Quality factors at this level seem to be given rather little formal attention. Indeed, some authors seem explicitly to deny them a place in considerations of quality. Why might this be?

It may be that technical production values are harder or more measurable, lending themselves more to investigation. It may be that they are more visible, readily attracting our attention. And the greatest excitement probably lies in tackling technical problems. Alternatively, the focus may arise from the research context – the focus on measurable errors in the setting of large, descriptive surveys. It may reflect aspects of the academic research model, seeking to maintain purity or independence, keeping the user at a distance, pursuing our own chosen agenda. Or it may be that service qualities are seen to be different in kind from production qualities – easy to do, unskilled, personal rather than corporate qualities, or lacking in any theoretical underpinning.

In survey practice, there does seem to be some movement. Aspects of service quality feature in professional codes and formal quality assurance schemes. But how complete is our acceptance?

#### **4. Service Delivery Quality**

Within this level of quality, we would like to suggest a spectrum of qualities. At one extreme we would place formal service standards – things that can be written into contracts and whose delivery can be monitored. These seem to be the focus of developments in quality assurance. But they only scratch the surface. At the other extreme, we suggest, are less tangible aspects of service – informal, the content of relationships rather than contracts. On this basis, we might revise our earlier model by subdividing the third ring into **service standards** – the formal elements – and **relationship quality** – the informal – as in Figure 2. In Levitt’s terminology, this subdivision represents the difference between the “expected” product, which increasingly includes basic service standards,

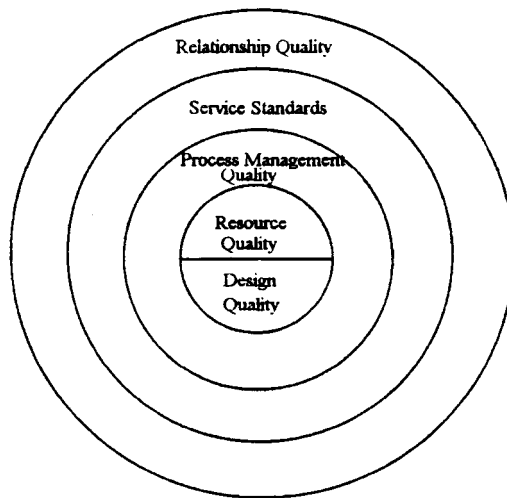


Fig. 2. Four levels of quality

and the “augmented” product – delivering something more than the customer expected or is used to receiving.

We should stress that none of the divisions in this model or classification is firmly drawn – just as process management shades into core qualities, service standards shade into TQM and the distinction between service standards and relationship quality is a fairly arbitrary subdivision of a continuum. But, treating it as a dichotomy, we would differentiate between:

- Meeting contractual requirements – and sharing the customer’s concerns.
- Treating resources as constraints – and seeing resource efficiency as a quality.
- Abiding by agreed dates – and working within the customer’s time frame.
- Writing a standard report – and gearing the presentation to the customer’s needs.
- Presenting findings – and discussing implications.
- Contributing information – and helping to build understanding.
- Meeting agreed measurable standards – and delivering “tender loving care.”

Factors in the new outermost ring do seem to be important to users – not at the expense of factors closer to the core but as additions to those factors – just as Levitt’s augmented product subsumes the generic and the expected products. They seem to deserve recognition and discussion as important elements of “quality.”

## 5. Managing Relationship Quality

Some, we fear, see factors at this level as mere gloss. Worse, they may see them as superficialities liable to be used to cover shortcomings in core qualities. Without in any way wishing to play down the importance of more central factors, we do see these outer ring factors as key to our ultimate goal – not just to do research as well as we can but to do research that people accept and use.

These are not just frilly accessories to be bolted on to the survey process but need to be engineered into our product. A broad parallel can be seen in the medical world. In the past,

many doctors saw their role as purely functional – to look at the symptoms, diagnose the problem and apply the recommended treatment. Any relationship with the patient was seen to be a luxury, or even undesirable. Now things are changing. Many doctors now see consulting and listening to the patient, in order to build a partnership, as an integral part of the process of determining treatment. Partnership with the patient has been engineered into their product. In other areas of service marketing too, it has come to be recognised that relationships – although mostly based on exchanges between individuals – can be managed for corporate advantage. (See, for example, Krapfel, Salmond, Spekman 1991.) Recognition is now in fact so strong that relationships confined to individuals can be seen – for example in law firms or management consultancy practices – as potentially threatening to the corporate good; they will last only as long as the individuals remain in post. Their conversion into corporate relationships is key to their durability.

Other authors have stressed the importance of trust in ensuring that marketing research findings are used by marketers and that interpersonal relationships are key to building that trust (Zaltman and Moorman 1988; Moorman, Deshpande, Zaltman 1993). We see relationship qualities in survey research in the same light. Indeed, like the BLS, we would invert our model, to place acceptance and use at the centre of a “target” (Figure 3). Then we have a model that implies that the essentials of resource and design quality must be fed to the user through process management, service standards **and** good relationships.

We do not wish to imply that good survey researchers do not create good relationships but do suggest there may need to be some changes of emphasis. Customer relationships should be accepted as part of our job of delivering quality, to be valued and enjoyed just as much as solving difficult technical problems – not as nuisance factors getting in the way of the job. They should be seen in supplier agencies as corporate as well as individual

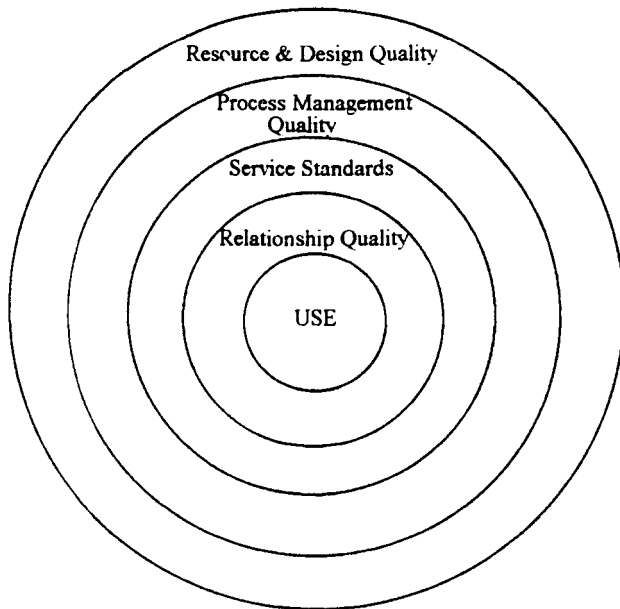


Fig. 3. Survey use as a target

qualities and responsibilities. We need to recognise that relationship skills can be trained and learned rather than merely being picked up – well or badly – on the job. And their profile could be raised by more discussion.

To achieve acceptance and use, a basic requirement is that we too must engineer partnership into our role. We have to break away from the position where the researcher owns the skills (**my** skills) and the customer owns the problems (**your** problems). We acknowledge that the learning process or culture change involved may not be entirely one-sided, in that not all survey users recognise the benefits of true collaboration. At the extreme, insulating us from their problems can justify their lack of regard for our skills. Then, the survey researcher must be more than merely responsive and seek actively to develop the partnership.

## 6. Where Next?

Our objective here has been only to urge survey researchers – and especially official statisticians – to take the widest possible view of the definition of “quality” in their product and to embrace “marketing” to the user as an essential component of culture rather than as merely a rather sordid intrusion on established practices. Discussion with both suppliers and users leads us to believe that such a change will be welcomed by most. It needs only legitimisation. In that context, there are issues that remain open to research:

### *Measuring the “softer” elements of quality*

We have referred above to the impact that considerations of measurability seem to have had on the focus of the survey research community. The quality of relationships and their management does not lend itself readily to the formality of models such as the Mean Squared Error approach to measuring statistical quality or any other simple additive framework. But most official statistical agencies, in common with other agencies and commercial service providers, nowadays engage in “customer satisfaction surveys.” Provided that we can accept “soft” measures of satisfaction on the equally “soft” relationship dimensions of quality and an inability to simply sum items to provide an overall satisfaction score, there seems to be no major barrier to assessment. This may, however, involve a parallel change of attitude towards measuring customer dissatisfaction, in order to minimise the risk that new measurements serve only to add to the warm glow of self-satisfaction among suppliers and instead focus their attention on opportunities for service improvement.

### *Customer priorities and needs*

Relatively straightforward surveys such as that carried out by Brace and Spackman into the priorities of market research users can do much to change our focus from “purity” (self centred) to “utility” (customer centred). The paucity of information we found in looking at the needs of UK users of official statistics suggests that more such work would be valuable.



### *Customer segmentation*

At just the point when we are urging survey researchers to embrace the concepts of “relationship management” and “relationship marketing,” discussion with researchers in those fields suggests that new shifts of emphasis may have to be accommodated. Thus, while it seems to be agreed that most service users value close relationships with suppliers, there is recognition that a minority would prefer not to have them. Such relationships can seem intrusive, threatening to the user’s expertise, even to smack of “sleaze.” Even more complex is the thought that an individual customer might place different values on close relationships according to the transaction involved. This will presumably be related to the customer’s self-confidence in the transaction – but how? Will customers attach greater value to relationships when they lack confidence? Or will this be just where they most fear being misled by the “friendly” and persuasive supplier. These questions will be on the agendas of service suppliers in other fields: do they deserve more attention in ours?

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