CHAPTER 7

SUMMARY AND CONCLUSIONS

7.1 INTRODUCTION

Research has shown that a revenue agency's image in the community is a key driver of voluntary compliance (Croome 2005/2006:28; Stoke *et al*. 2005:10). Voluntary compliance is also maximised with better customer service, which makes it easier to comply with tax obligations (Dhillon & Bouwer 2005:2). Croome (2005/2006:29) also contends that levels of tax compliance are enhanced when taxpayers believe they are being treated fairly. The quality of the services provided by SARS is therefore crucial, as service quality directly influences tax compliance.

In order to establish the perceptions of tax practitioners with regard to the quality of SARS's service, a model of service quality is required – in other words, a model of how the quality of services is perceived by tax practitioners. When the service provider understands how the services are to be evaluated by the users, it becomes possible to identify how to manage these evaluations and how to influence them in a desired direction (Gaster & Squires 2003:57; Grönroos 1988:10; Palfrey *et al*. 1992:126; Philip & Hazlett 1997:264; Seth *et al*. 2005:914).

Unfortunately, thus far, all the attempts at creating a suitable service quality model have been fragmented and have failed to focus on the overall services of SARS. Most were limited to a few isolated questions on taxpayers' perceptions with regard to encounters with SARS. To date no service quality model that could be used to measure the actual performance of SARS or the quality of the services it renders, as perceived by tax practitioners, has been available.

The objective of the present research was therefore to establish the perceptions that tax practitioners hold with regard to the services SARS renders in order to develop a service quality model that SARS could use. The development of a service quality model for the assessment of the services SARS provides is justified, as it is an essential means to improving the services SARS renders and therefore also to increasing voluntary compliance.

The service quality model presented in the present research is based on the results of a qualitative study using the critical incident technique. The critical incident technique was chosen as the method to be used for building the “lens of the customer” for the evaluation of the tax practitioner’s (customer) evaluation of the quality of the services SARS renders.

In this final chapter, the conclusions of the present research with regard to achieving the stated objective are presented. The chapter commences with summaries of the theoretical constructs relevant to the present research (Section 7.2) and the research methodology applied to ensure that the objective of the present research is reached (Section 7.3). After these summaries, the proposed service quality model including both the traditional (Section 7.4) and the e-services (Section 7.6) are presented. Both parts of the model proposed present theoretical frameworks as “blueprints” for building the “lens of the customer”. To ensure that both theoretical frameworks will actually achieve the objective of this study, that is, to provide a proposed service quality model for evaluating the service quality of SARS as perceived by tax practitioners, it is important to determine the validity and reliability of the proposed theoretical frameworks. In Sections 7.5 and 7.7, the validity of the proposed model is reflected upon. It was necessary to distinguish between the part of the service quality model proposed for the traditional services and the part of the model proposed for the e-services – the results of this comparison are presented in Section 7.8. After the presentation, validation and comparison of both parts of the model, the research implications of the present research are presented in Section 7.9. Finally, the limitations and shortcomings of the present research are investigated (Section 7.10) and any future actions required or areas for future research are set out (Section 7.11).

7.2 IDENTIFYING AND DEFINING THE THEORETICAL CONSTRUCTS

The first step in the research was a detailed literature review, which was carried out to establish the definitions relevant to the present research. The research indicated that **service quality** and **customer satisfaction** are two distinct concepts. Because the development of a service quality model for the evaluation of the quality of the services SARS renders was the primary focus in the present research, it appeared to be more appropriate to establish the service quality construct than to measure actual customer satisfaction. It was also established that services and quality are elusive phenomena. They are therefore very difficult to define. Nevertheless, an attempt was made to analyse and describe these phenomena.

Services were analysed with reference to their characteristics and the possible influence of these characteristics on the measurement of service quality. The relevant characteristics are the intangibility, relative inseparability, interdependence and heterogeneity of services. All of these characteristics, directly or indirectly, have an impact on the model for the measurement of service quality. The service quality model for the measurement of services assesses psychological experiences. Hence, the development of a model to elicit the perceptions of tax practitioners to measure the quality of the services SARS renders was confirmed to be appropriate for the present research.

It was also established that the service quality model should provide for the separate measurement of the different services of SARS, as all the services are not located at the same point on the inseparability continuum.

The characteristic of heterogeneity implies that the results obtained from using the service quality model can only be reliable when there is a response rate large enough to be representative of all the different locations to which SARS renders its services.

Quality has been described in the light of the various approaches used by those who have studied this phenomenon. It was found that the user-based approach (defining quality from the user's perspective) in combination with the manufacturing approach is the most suitable approach for the present research.

For the purposes of the present research, it is acknowledged that the combined term **service quality** is a multidimensional, hierarchical construct, which means that customers form their service quality perceptions on the basis of an evaluation of performance at multiple levels.

In line with the user-based approach to quality, **perceived service quality** was found to be influenced by various factors (for example, motives, needs, drives, wants, experiences, culture, language and gender). This implies that the service quality which is to be established by the proposed service quality model is perceived subjectively by tax practitioners, that it is predominantly a cognitive and, to a lesser extent, an affective judgement, that it is represented by the difference between perceptions of performance and expectations, and that it is related to, but not equivalent to, satisfaction.

7.3 RESEARCH METHODOLOGY

The outcome of the literature review served as a theoretical underpinning for the development of the proposed service quality model. The literature review suggested that a user-based approach to quality was the most relevant approach to this study – as Johnson and Gustafsson (2000:47) put it, it is important to build the "lens of the customer".

In order to develop the specific "lens of the customer" needed to evaluate the services SARS renders, an in-depth, qualitative approach was required to identify a comprehensive range of determinants that potentially drive service quality in the revenue service industry and setting, as suggested by Johnson and Gustafsson (2000:47). One such qualitative method is the critical incident technique (CIT). The critical incident technique relies on a set of procedures to collect comments on service experiences, to perform a content analysis and to classify the observations of service experiences. The critical incident technique was chosen as the method to be used for building the "lens of the customer" for the evaluation of the tax practitioner's (customer) evaluation of the service quality of SARS, because the evaluation of a tax practitioner's perceptions of the service quality of SARS

- is a relationship-oriented assessment of service quality (Odekerken-Schröder *et al.* 2000);
- is carried out by the customers (tax practitioners) (Bitner *et al*. 1990; Odekerken-Schröder *et al.* 2000);
- is carried out in the business-to-customer context (Gremler 2004);
- seeks to provide the answer to a question in the service research environment (Gremler 2004); and
- is measured where the user-based approach of quality has been identified as the most suitable approach to apply (Johnson and Gustafsson 2000; Parasuraman *et al.* 1985).

The purpose of using the critical incident technique in the present research was to assist in the development of a service quality framework which could be used to develop a quantitative survey instrument to measure the quality of SARS's services. The critical incidents that were collected were classified into categories of different service determinants (using content analysis), so that the important service determinants that are relevant to and need to be incorporated into the service quality model could be identified.

The critical incident technique was thus used in this study both to confirm service determinants identified in the literature review and to assist in the development of new service determinants.

The critical incident data were collected by means of open-ended questionnaires (the distributed and web-based questionnaires) which tax practitioners registered with SARS in terms of section 67A of the Income Tax Act were asked to complete. For the sake of convenience and to gain access to the data base of tax practitioners registered with SARS, the web-based questions formed part of a larger data collection instrument administered by SARS. For the purposes of the present research, the respondents were asked to evaluate the *service quality of SARS as perceived by the tax practitioners in all interactions with SARS*. Questions 1 and 2 included a list of all the possible service channels. The positive responses on all the service channels were grouped into Question 1, while the negative responses on all the service channels were grouped into Question 2. Questions 3 and 4 addressed the respondents' positive and negative experiences with regard to various business processes.

The analysis of the responses provided by the tax practitioners involved three processes. The first was the identification of usable critical incidents. The second was the development of a classification scheme for the content analysis. The third was a content analysis of the critical incidents that had been identified.

The analysis procedure advocated by Flanagan (1954) indicates that the critical incident itself is the basic unit of analysis. Hence, for the purposes of the present research, the basic unit of analysis (the critical incident) was defined in such a manner as to include statements about SARS's service delivery.

After the data had been collected and the relevant critical incidents had been identified, the next step was to analyse the data. The first step in the data analysis in the present research was to develop a classification scheme for the purposes of the content analysis. In the present research, the existing service quality models were used as a basis to develop a classification scheme to assist in identifying the determinants that are important in evaluating the service quality of services provided by SARS. As a starting point, the original ten service quality determinants from the study by Parasuraman *et al.* (1985) were listed in a classification scheme. This classification scheme was then expanded, using the

other service quality instruments investigated in the literature review. Because Kang and James (2004) and Philip and Stewart (1999) found that the SERVQUAL dimensions do not measure the technical quality of a service, but only its functional quality, all the different business processes were also added to the classification scheme. Santos (2003), Zeithaml *et al.* (2002) and Zhu *et al.* (2002) found that e-service quality is influenced by determinants that differ from traditional service quality. Consequently, the SARS service channels through the website, as well as e-filing, were listed separately in the classification scheme. Although the literature study indicated that models of service quality are equally applicable to both the private and the public sectors, to check whether this was really the case, specific aspects were included in the classification scheme that may be relevant only to SARS as part of the public sector. Based on the experience of the researcher, additional determinants were added to the classification scheme.

The classification scheme developed in the present research was refined and confirmed, as suggested by Flanagan (1954:20), using a relatively small sample of critical incidents. In applying the classification scheme to the bulk of the data (the critical incidents from the web-based questionnaire), the classification scheme was amended in a constant process which resulted either in the expansion of the definitions of current categories or in the addition of new categories. At the end of the content analysis process, the classification scheme was empirically tested using a holdout sample, as suggested by Gremler (2004:82) and Johnson and Gustafsson (2000:60). Because the content analysis of the holdout sample added nothing new to the classification scheme, it was concluded that the categories in the classification scheme were comprehensive.

The analysis of the critical incidents into the classification scheme was performed by the researcher and nine research assistants. The research assistants were thoroughly trained, and each critical incident was independently classified by at least three, but mostly four different persons. Although no formal indices are available for the reliability of the interjudge classifications, it is reasonable to assume that the thoroughness of the process, as well as the interjudge agreement of more than 80% for all the groups, should indicate that the results of the content analysis were reliable. The initial training of the research assistants and the pre-tests on the subset of data (Group 35) that were done early in the coding process also contributed to the reliability of the results. After a careful evaluation of

the process followed for the content analysis, the results were considered to be reliable and the results could therefore be reported as they stand.

After the preparation of the summaries of the frequencies of the responses in accordance with the relevant classification scheme, the data analysis results and the relevant elements from the theoretical model derived from the literature survey were used to design the two parts of the model proposed in the present research, as presented in Sections 7.4 and 7.6.

7.4 TRADITIONAL SERVICE QUALITY MODEL

The first conclusion in the present research derived from the results of the study (Conclusion 5.1) states that in building the “lens of the customer”, a distinction must be made between the traditional service modes and the e-service modes. Conclusion 5.2 states that, in order to ensure that a particular traditional service determinant is measured for the full spectrum of services that SARS renders, e-services should be added as a service channel for the identified service determinants in the traditional services.

In this section, the proposed service quality model as it relates to the traditional services (including the addition of the e-services as a service channel) is presented. The service quality part of the model, with all its components, is presented first (see Section 7.4.1). The recommendations on the content of the questions needed to evaluate the different components of the proposed model in respect of service quality are then listed in Section 7.4.2. Finally, the managerial implications of the proposed model for service quality are addressed in Section 7.4.3.

7.4.1 Proposed service quality model

For the purposes of the present research, it is acknowledged that service quality is a multidimensional, hierarchical construct, which means that customers form their service quality perceptions on the basis of an evaluation of performance at multiple levels. The first level is the evaluation of various service attributes within different identified service determinants, the result of which can be combined in the evaluation of different service dimensions.

Grönroos (1984) identified three service dimensions: the technical dimension (“what”), the functional dimension (“how”) and the corporate image. Later, Kang and James (2004)

found empirical evidence for Grönroos's (1984, 1988) service quality dimensions. Hence, Grönroos's (1984, 1988) model was used in the present research as the basis for defining the dimensions used to develop the proposed traditional service quality model. The frequencies of the results of the qualitative study allocated to each of the three dimensions are summarised in Table 7.1.

Table 7.1: Service quality dimensions relevant to the present research

Service quality dimension	Positive responses	Negative responses	Total number of critical incidents	Percentage (%) (n = 4 183)
Functional dimension	1 277	2 335	3 612	86.35%
Technical dimension	143	370	513	12.26%
Image dimension	36	22	58	1.39%

All three service quality dimensions identified by Grönroos (1984, 1988) were found to be relevant to the present research. The functional quality dimension was found to be the most important dimension in the proposed SARS service quality model: 86.35% of the critical incidents related to it. The technical dimension attracted far fewer responses – only 12.26% of the responses were allocated to this dimension. The image dimension was found to be the least important of the three service quality dimensions, with only 1.39% of the critical incidents allocated to it.

The results of the present research therefore support Grönroos's (1984:41) findings, which suggested that functional quality is more important to the perceived service quality than technical quality. Schneider and White (2004:33) argued that the identified service determinants of perceived service quality essentially pertain only to the functional (how), rather than to the technical (what) dimensions. Czepiel *et al*. (1985:13) claimed that the reason why functional quality is more important than the technical quality is that clients are better able to judge the quality and satisfaction of human interactions than they can judge the quality of technical services.

Johnson and Gustafsson (2000:64) suggest that reputation (image) should be regarded as an outcome rather as than a driver of service quality, because reputation acts as a type of overall evaluation, making it problematic as a driver of service quality. They also regard reputation as a psychological anchor that affects perceptions of service quality and

suggest that it is difficult to compress the measurement into a single step. It is possible that this difficulty in measuring SARS's image contributed to the low number of service aspects classified under this service quality dimension.

Apart from Grönroos's (1984, 1988) three service quality dimensions, five service determinants (namely responsiveness, assurance, empathy, reliability and tangibles) were found to be relevant to the proposed SARS service quality model (Conclusion 5.2). These service determinants were defined for the purposes of the present research (summaries of these definitions are provided in Table 7.2). It was found that of these five determinants, responsiveness, assurance and empathy are probably more important than reliability. Of the five service determinants, the tangibles service determinant appeared to be the least important determinant for the SARS service quality model (Conclusion 5.3). The results of the present research also confirm the original argument by Berry *et al*. (1985:45) and the findings of Haywood-Farmer (1988) that the relative importance of the service determinants would vary from one service industry to the next (Conclusion 5.4). It was further found that the service quality model for the traditional services should not include any evaluation as a separate service determinant of the software or systems used by SARS (Conclusion 5.58).

Table 7.2: Definitions of various service determinants identified in the present research

Service determinant	Definition for the present research
Responsiveness	The willingness (including the attentiveness) of employees, as well as the actual timeliness or speed of services performed.
Assurance	The knowledge and courtesy of employees and the ability of the operational systems and physical resources to inspire trust.
Empathy	The caring and individualized attention SARS provides to the tax practitioners, including tax practitioners' sense that SARS's • location; • operating hours; and • employees and operational systems are designed and operate so that it is easy to gain access to the service and that SARS is prepared to adapt to the demands and wishes of tax practitioners in a flexible way.
Reliability	The ability of SARS's employees and systems • to perform services accurately; and • to keep promises (trustworthiness).
Tangibles	The appearance of physical facilities and employees of SARS.

For each of the relevant service determinants, various service attributes and service aspects were identified that contributed to the service quality of the particular service determinant. The service determinants and detailed service attributes and service aspects as defined for the purposes of the present research were classified into Grönroos's (1984, 1988) three-dimensional service quality model, as set out in Table 7.3.

Table 7.3 below summarises the results of the critical incident analysis for each of the identified service attributes, service determinants and service dimensions. However, it is also important to understand the relative importance of each component of the service quality model. Table 7.4 therefore presents the results of the present research for each of the components in the service quality model.

Table 7.3 Service quality model for the traditional services

TECHNICAL DIMENSION (service outcome)

Service determinant	Service attribute
Assurance	• Knowledge of employees

FUNCTIONAL DIMENSION (service process)

Service determinant	Service attribute
Responsiveness	• Speed of performing the service • Willingness of employees
Assurance	• Politeness and friendliness of employees • Consistency • Administration of the operational process • Confidentiality • Physical safety
Empathy	• Waiting times • Communication o Communication process o Direct contact with operating employees o Communication skills of employees o Understandability of contact employees o Communication with wrong person o Understandability of documentation • Adaptability • User-friendliness • Assistance • One-stop service • Convenience of locations • Convenience of operating hours
Reliability	• Accurate service delivery o Accurate first-time service delivery o Service recovery o Service failure o Loss of documents • Adherence to specific promises SARS made • Software
Tangibles	• Physical facilities • Sound quality of call centre

IMAGE DIMENSION (filtering function)

Empathy	• Adaptability o Continuous improvement of service offerings
Reliability	• Adherence to promises in general o Adherence to general code of conduct

Table 7.4: Responses from study per service dimension, service determinant, service attribute and service aspect

Service attribute	Positive (n = total for attribute)	Negative (n = total for attribute)	Total	Percentage (%) (n = 4 183)
TECHNICAL DIMENSION (service outcome)				
Assurance service determinant				
Knowledge of employees	143 27.88%	370 72.12%	513 12.26%	12.26%
FUNCTIONAL DIMENSION (service process)				
Responsiveness service determinant				
Speed of performing the service	218 31%	485 69%	703 16.80%	16.80%
Willingness of employees	248 63.92%	140 36.08%	388 9.28%	9.28%
Assurance service determinant				
Politeness and friendliness of employees	155 71.76%	61 28.24%	216 5.16%	5.16%
Consistency	6 4.65%	123 95.35%	129 3.08%	3.08%
Administration of the operational processes	45 45.46%	54 54.54%	99 2.37%	2.37%
Confidentiality	2 16.67%	10 83.33%	12 0.29%	0.29%
Physical safety	1 50%	1 50%	2 0.05%	0.05%
Empathy service determinant				
Waiting time	85 21.46%	311 78.54%	396 9.46%	9.47%
Communication: Total	130 35.82%	233 64.18%	363 8.68%	8.68%
• *Communication process*	*85* *47.49%*	*94* *52.51%*	*179* *4.28%*	*4.28%*
• *Direct contact with operating employees*	*34* *26.56%*	*94* *73.44%*	*128* *3.06%*	*3.06%*
• *Communication skills of employees*	*9* *37.50%*	*15* *62.50%*	*24* *0.57%*	*0.57%*
• *Understandability of contact employees*	*2* *11.11%*	*16* *88.89%*	*18* *0.43%*	*0.43%*
• *Communication with wrong person*	*0* *0%*	*12* *100%*	*12* *0.29%*	*0.29%*
• *Understandability of documentation*	*0* *0%*	*2* *100%*	*2* *0.05%*	*0.05%*

Adaptability	18 29.03%	44 70.97%	62 1.48%	1.48%
User-friendliness	10 11.49%	77 88.51%	87 2.08%	2.08%
Assistance	9 27.27%	24 72.73%	33 0.79%	0.79%
One-stop service	4 12.50%	28 87.50%	32 0.77%	0.77%
Convenience of locations	4 40%	6 60%	10 0.24%	0.24%
Convenience of operating hours	2 40%	3 60%	5 0.12%	0.12%
Reliability service determinant				
Accurate service delivery: Total	163 21.28%	603 78.72%	766 18.31%	18.31%
• *Accurate first-time service delivery*	*163* *45.92%*	*192* *54.08%*	*355* *8.73%*	*8.49%*
• *Service recovery*	*0* *0%*	*10* *100%*	*10* *0.24%*	*0.24%*
• *Service failure*	*0* *0%*	*295* *100%*	*295* *7.05%*	*7.05%*
• *Loss of documents*	*0* *0%*	*106* *100%*	*106* *2.53%*	*2.53%*
Adherence to specific promises made by SARS	10 22.22%	35 77.78%	45 1.08%	1.08%
Software	5 25%	15 75%	20 0.47%	0.48%
Tangibles service determinant				
Physical facilities	7 36.84%	12 63.16%	19 0.45%	0.45%
Sound quality of the call centre	0 0%	4 100%	4 0.10%	0.10%
General responses				
General	155 70.14%	66 29.86%	221 5.28%	5.28%

IMAGE DIMENSION (filtering function)

Empathy service determinant				
Continuous improvement of service offerings	34 100%	0 0%	34 0.81%	0.81%
Reliability service determinant				
Adherence to general code of conduct	2 8.33%	22 91.67%	24 0.58%	0.57%

It was found that only one service attribute, namely the knowledge of the employees classified under the assurance service determinant, could really be regarded as evaluating the technical quality of the services. Only 12.26% of the responses for the traditional services were allocated to the knowledge of employees service attribute.

Two service aspects were found to be relevant to the image dimension. The first was continuous improvement of service offerings, classified with the adaptability service attribute under the empathy service determinant (0.81% of responses). The second was adherence to a general code of conduct, classified with adherence to promises in the general service attribute, under the reliability service determinant (0.58% of responses).

All the other responses (86.35%) were allocated to the functional quality dimension of the proposed service quality model.

Although the proposed service quality model includes service aspects from all three dimensions, the main focus is therefore on the functional quality. All five the identified service determinants are represented in the functional quality dimension, which has many more identified service attributes than either of the other two dimensions. The technical quality is only partly represented by one service determinant (assurance) and fully represented by the knowledge of employees service attribute in the assurance service determinant. The image dimension is partly represented by the empathy and the reliability service determinants. No specific service attribute could be allocated to the image dimension, but two service aspects among the service attributes (which were mainly classified under the functional quality dimensions) were allocated to the image dimension. The results of the study supports the conclusions of Gummesson (1992) that a specific service determinant could be valid for more than one service dimension (refer to Section 3.3.6).

7.4.2 Questions to be included to evaluate the service quality of SARS

The present research does not generally prescribe the specific wording in the measuring instrument to be used to evaluate the service quality of SARS, but the content of the questions to be included in such a model is proposed in Table 7.5 below. The detailed content is presented per service determinant. The determinants are in turn presented in the order of perceived importance, based on response frequencies. In addition to the detailed aspects recommended for inclusion in the service quality model, an additional global judgement should also be measured separately (see Conclusion 5.61).

Table 7.5: Proposed content of the measuring instrument for the traditional service quality of SARS

Conclusion number	Proposed content of measuring instrument
Responsiveness service determinant	
5.6	A question that measures – only for the traditional services – the speed (the number of working days) of the turnaround time for resolving queries or updating required taxpayer information when practitioners correspond with SARS by means of • a fax; • the postal services; • e-mail (including tax practitioners' and e-filing e-mails); and/or • correspondence that is hand-delivered at SARS branches. The service quality model should also include a question that measures the time (in minutes) that it takes to resolve a query or update information if the tax practitioner • visits a SARS branch; or • telephones the call centre.
5.7	A question that measures – only for the traditional services – the speed (number of working days) of • VAT registrations; and • other tax registrations.
5.8	It is recommended that the following question on the speed of the services relating to the dispute resolution process be included in the service quality model: "In the case of a dispute on a tax assessment that does not arise because of a processing error by SARS, how long does it take from the date of the assessment to the date that the letter of rejection or acceptance of the objection is received?"
5.9	Questions that evaluate the speed with which tax returns are processed and the speed of the tax assessment process. Separate evaluations should be included for the VAT and PAYE returns, and the income tax returns. For each type of return, provision should be made to distinguish between the speed of the traditional service channels and that of the e-filing service channel. For income tax returns, separate evaluations should be available for the peak periods (July to February) and the off-peak periods (March to June). Recommended framework for questions: The speed (number of working days) with which PAYE and VAT returns are processed • when e-filing is used; and • when the returns are submitted manually. The speed (number of working days) with which income tax returns are processed and assessments issued during peak periods (July to February) • when e-filing is used; and • when the returns are submitted manually. The speed (number of working days) with which income tax returns are processed and assessments issued during off-peak periods (March to June) • when e-filing is used; and • when the returns are submitted manually.

5.10	A question that evaluates separately the speed (in working days) of processing and paying refunds to clients with regard to • income tax refunds; o when the tax return is submitted through e-filing; or o when the tax return is not submitted through e-filing; and • VAT refunds; o when the tax return is submitted through e-filing; or o when the tax return is not submitted through e-filing.
5.11	Questions that evaluate • the timeliness of the availability of the income tax returns for natural persons through both o the traditional service channels; and o the e-filing service channel; and • the timeliness of the availability of the income tax returns for companies and trusts through both o the traditional service channels; and o the e-filing service channel.
5.12	A question that evaluates the speed (in working days) in issuing tax clearance certificates.
5.13	A question that evaluates the speed at which payments made to SARS are processed.
5.14	A question that evaluates the processing speed (number of working days) of deregistrations by SARS.
5.15	A question addressing the degree of willingness of SARS employees to assist tax practitioners. This question should only be evaluated for the services rendered • at the branches; • through the call centre (normal, tax practitioners' and e-filing call centre); and • e-mail (normal and e-filing e-mail).

Assurance service determinant

5.16	A question that tests whether the tax practitioners perceive the employees who provide services to the tax practitioners to have the necessary knowledge and skills to provide sufficiently clear, accurate and helpful responses • at the branches; • through the call centres (the normal, the tax practitioners' and the e-filing call centre); and/or • through e-mail (normal and e-filing e-mail).
5.17	A question on whether, if first-time resolution is not possible when the call centre is contacted, the tax practitioner is always advised of the next step(s) he or she should take.
5.18	A question that tests whether tax practitioners perceive the knowledge and skills of the employees of SARS who deal with the dispute resolution aspects (provision of reasons for assessments and replies to objections) to be adequate to provide clear, accurate and helpful responses.
5.19	A question to determine whether tax practitioners perceive the contact employees at SARS to be concerned about the tax practitioners' problems and willing to assist them professionally in a polite and friendly way at • the branches; and • the call centres.
5.20	A question with regard to the acknowledgement of the receipt of documents through the branches, e-mail, fax, post and e-filing service channels and the acknowledgement of a query lodged at the call centre.

5.21	A question to evaluate whether tax practitioners always know at what stage in the process a particular request or submission is.
5.22	A question to evaluate whether tax practitioners always know when a specific service that is to be performed by SARS has been completed.
5.23	A question to evaluate whether SARS's employees always deal consistently with the same service aspect.
5.24	A question to determine whether tax practitioners feel physically safe during their interactions with SARS at the branches.
5.25	A question to determine whether tax practitioners are satisfied with the verification procedures required before taxpayer information is provided to the tax practitioners.
5.54	A question to determine whether tax practitioners are always informed of the required actions and due dates in order for them to fulfil their tax obligations.
5.55	A question to evaluate the availability of a private environment for a tax practitioner's interactions with SARS, when such an environment is preferred and requested.

Empathy service determinant

5.26	A question to determine the perceptions of tax practitioners with regard to waiting time before they are served at the • branches; and • call centres (including the normal, the tax practitioners' and the e-filing call centres).
5.27	A question to determine whether SARS officials are available at the scheduled time when a tax practitioner has a scheduled appointment.
5.28	A question relating to the preference of the tax practitioner with regard to particular service channels. All the service channels should be listed; and specific frequencies of use as well as perceived effectiveness should be measured.
5.29	A question to determine whether tax practitioners are provided with designated service channels (only for their use). This should be evaluated for the call centres (both the traditional and the e-filing call centres), e-mail and branches. The question might include the effectiveness of this strategy, and whether the option should be available.
5.30	A question to determine whether communication or interaction with tax practitioners is sufficient to ensure that tax practitioners are always informed of any changes to the compliance procedures at SARS.
5.31	A question to determine whether there are enough opportunities for tax practitioners to communicate any problems or needs to SARS.
5.32	A question to determine whether tax practitioners perceive SARS's internal communication processes to be effective.
5.33	A question with regard to the acceptability of the particular person through whom communication with SARS is channelled. This question could be accompanied by a closed-ended question with two alternatives. The one alternative is the option to speak to the specific tax consultant dealing with the tax file of the client. The second option is to speak to any person who is knowledgeable and can assist the tax practitioner.
5.34	A question to determine whether the identity of employees working with specific tax matters is disclosed.
5.35	A question to determine the efficiency of both the verbal and the written communication skills of SARS employees. It is not advised that this should be split into the different service channels, but it is suggested that the question should address communication skills in general.

5.36	A question to determine whether the contact employees at SARS communicate in a language that is fully understandable to the tax practitioners. The section dealing with demographic information should also include a question relating to the language of preference (or home language) of the tax practitioner.
5.37	A question to determine whether the communication from SARS is always with the appropriate person.
5.38	A question to determine whether the written documentation or any tax form or return received from SARS is provided in a language fully understandable to the tax practitioner concerned.
5.39	A question to evaluate whether tax practitioners perceive SARS as dynamic and as continuously striving to improve its service offerings.
5.40	A question to determine whether SARS employees adapt to the particular individual needs of tax practitioners.
5.41	A question that tests the effectiveness of the EFT banking payment system.
5.42	A question that tests the practicality of the requirement that all taxpayers should have a bank account.
5.43	A question that tests the user-friendliness or burdensomeness of the following SARS business processes: • tax registrations, • tax returns, • account queries, • dispute resolution process, • updating of information process, and • tax assessments.
5.44	A question that evaluates SARS's ability to provide a one-stop service at branches for all the services SARS renders.
5.45	A question that evaluates the degree of duplication of information required to be submitted to various SARS divisions.
5.46	A question that evaluates the degree of assistance received from SARS in ensuring successful service delivery.
5.47	A question that evaluates the convenience of the location of the various SARS branches.
5.48	A question that evaluates the convenience of SARS's operating hours.

Reliability service determinant

5.49	A question that evaluates SARS's ability to perform a service correctly the first time. This should be tested for all the different business processes. The tax assessment and tax return business processes should also be evaluated for both the traditional and e-service modes. The service quality model should thus include a question that evaluates the ability of SARS to deliver accurate first-time service solutions in • processing tax registrations – o specifically evaluating VAT registrations; and o evaluating other registrations (excluding VAT registrations); • issuing tax returns – o when tax practitioners use traditional service modes; and o when tax practitioners use the e-service mode; • processing and issuing tax assessments – o when tax practitioners use traditional service modes; and o when tax practitioners use the e-service mode; • processing tax payments – o when tax practitioners use traditional service modes; and o when tax practitioners use the e-service mode; • processing and paying tax refunds; • processing and issuing tax clearance certificates; and • processing objections and issuing answers to the objections.
5.50 and 5.52	A question that evaluates SARS's ability to perform a service correctly the first time. This should be tested for the following service channels: • branches; • call centres (including the designated tax practitioners' and the e-filing call centres); • e-mail facilities (including the e-filing e-mail); and • faxes or posted letters. The question should provide for different scales in the measuring instrument. One end of the scale should reflect accurate first-time service delivery and the other end of the scale should reflect total service failure.
5.51	A question that evaluates SARS's ability to put in place an effective system to ensure successful service recovery when SARS makes errors.
5.53	A question to evaluate whether SARS loses documents after they have been submitted.
5.56	A question to determine whether tax practitioners perceive SARS as abiding by its own code of conduct. The first part of the question should be a closed-ended question with the different levels of agreement as response options. To assist SARS to identify problem areas, it may be useful to include an open-ended question eliciting the reason why a tax practitioner answered in the negative. An alternative could be to list the values mentioned and to ask to what degree SARS adheres to them. In the latter case, a qualitative question can be avoided, but the questionnaire would be longer.
5.57	A question to determine whether the employees of SARS at both the call centres and the branches always do something if they have promised to do it.

Tangibles service determinant

5.59	A question to evaluate the comfort, size and visual appeal of the physical facilities at SARS branches.
5.60	A question to evaluate the sound quality of the various call centres.

Because not all tax practitioners use all the traditional service channels for a specific business process, it is further recommended that all the questions should provide an

option for the tax practitioner to respond that he or she does not use a particular service channel.

7.4.3 Managerial implications of the present research with regard to the traditional services

Although the present research did not attempt to evaluate the actual service quality of SARS, the frequencies of the responses relating to the various service attributes (refer to Section 7.4.3.1 below) may assist SARS in determining what service aspects are the most important to tax practitioners. It is not only the frequencies of the service attributes identified in the research that may be relevant to SARS, but SARS may also be interested in the results of the present research presented per service channel (see Section 7.4.3.3) and business process (see Section 7.4.3.2).

7.4.3.1 Relative importance of the various service attributes

The frequencies of the responses relating to the various service attributes could assist SARS in directing its service strategies to the identified items to enhance the quality of the services it provides to tax practitioners. The importance of the service attributes identified is listed in detail in Table 7.6 below.

Table 7.6: Frequencies of critical incidents per service attribute for the traditional services

Service determinant	Service attribute	Positive (n = total for attribute)	Negative (n = total for attribute)	Total	Percentage (%) (n = 4 183)
Reliability	Accurate service delivery	163 (21.28%)	603 (78.72%)	766	18.31%
Responsiveness	Speed of performing the service	218 (31%)	485 (69%)	703	16.80%
Assurance	Knowledge of employees	143 (27.88%)	370 (72.12%)	513	12.26%
Empathy	Waiting time	85 (21.46%)	311 (78.54%)	396	9.46%
Responsiveness	Willingness of employees	248 (63.92%)	140 (36.08%)	388	9.28%
Empathy	Communication	130 (35.82%)	233 (64.18%)	363	8.68%
General	General	155 (70.14%)	66 (29.86%)	221	5.28%
Assurance	Politeness and friendliness of employees	155 (71.76%)	61 (28.24%)	216	5.16%
Assurance	Consistency	6 (4.65%)	123 (95.35%)	129	3.08%
Assurance	Administration of the operational process	45 (45.46%)	54 (54.54%)	99	2.37%
Empathy	Adaptability	52 (54.17%)	44 (45.83%)	96	2.30%
Empathy	User-friendliness	10 (11.49%)	77 (88.51%)	87	2.08%
Reliability	Adherence to specific promises made by SARS	10 (22.22%)	35 (77.78%)	45	1.08%
Empathy	Assistance	9 (27.27%)	24 (72.73%)	33	0.79%
Empathy	One-stop service	4 (12.5%)	28 (87.5%)	32	0.77%
Reliability	Adherence to promises in general	2 (8.33%)	22 (91.67%)	24	0.58%
Reliability	Software	5 (25%)	15 (75%)	20	0.47%
Tangibles	Physical facilities	7 (36.84%)	12 (63.16%)	19	0.45%
Assurance	Confidentiality	2 (16.67%)	10 (83.33%)	12	0.29%
Empathy	Convenience of locations	4 (40%)	6 (60%)	10	0.24%
Empathy	Convenience of operating hours	2 (40%)	3 (60%)	5	0.12%
Tangibles	Sound quality of call centre	0 (0%)	4 (100%)	4	0.1%
Assurance	Physical safety	1 (50%)	1 (50%)	2	0.05%

Although it was found that responsiveness, assurance and empathy are probably more important than reliability, it is a service attribute from the reliability service determinant that was found to be the most important: the accurate service delivery service attribute in the reliability service determinant attracted the highest number of responses, namely 18.31% (766 critical incidents, n = 4 183) of which 78.72% were negative (603 critical incidents, n = 766) and 21.28% were positive (163 critical incidents, n = 766). This service attribute not only attracted the highest total number of responses containing relevant critical incidents, but also attracted the highest number of negative responses of all the service attributes. The number of negative responses for this service attribute was also much higher than the average number of negative responses for all the traditional services, at approximately 60%.

The service attribute that attracted the second highest number of total responses (and again the second highest number of negative critical incidents) was the speed of performing the service. This service attribute was classified as part of the responsiveness service determinant. A total of 16.80% of the responses were allocated to it (703 critical incidents, n = 4 183), of which 31% (218 critical incidents, n = 703) were positive and 69% (485 critical incidents, n = 703) were negative. Again the proportion of the negative responses (69% versus 60%) was proportionally higher than the average for the present research.

The third most important service attribute (and the only other service attribute that attracted more than 10% of the responses) was the knowledge of employees service attribute, classified under the assurance service determinant. This service attribute attracted 12.26% of the total responses (513 critical incidents, n = 4 183), of which a very high proportion of 72.12% (370 critical incidents, n = 513) were negative and only 27.88% (143 critical incidents, n = 513) were positive.

The identification of the three service attributes that attracted the highest number of responses (that is accurate service delivery, speed of performing the service and knowledge of employees service attribute) should thus assist SARS in focusing its service strategies. The fact that the proportion of negative responses was so high for all three of the “most important” service attributes may indicate that SARS should focus its service improvement strategies on these aspects sooner rather than later.

Four service attributes (excluding the general allocations) attracted fewer than 10% of the responses, but more than 5%, namely:

- waiting time, which attracted 9.46% of the responses (396 critical incidents, n = 4 183), of which 21.46% were positive and 78.54% were negative;
- willingness of employees, which attracted 9.28% of the responses (388 critical incidents, n = 4 183), of which 63.92% were positive and 36.08% were negative;
- communication, which attracted 8.68% of the responses (363 critical incidents, n = 4 183), of which 35.82% were positive and 64.18% were negative; and
- politeness and friendliness of employees, which attracted 5.16% of the responses (216 critical incidents, n = 4 183), of which 71.76% were positive and 28.24% were negative.

The waiting time service attribute, which was part of the empathy service determinant, attracted a proportionally higher number of negative responses (78.24% versus 60%), but the willingness of employees and the politeness and friendliness of employees attracted a proportionally higher number of positive responses. The four most important service attributes thus all attracted a proportionally high number of negative responses. It is interesting that these four service attributes each contributed to four different service determinants – (in order of importance) reliability, responsiveness, assurance and then empathy. Tangibles still appears to be the least important for the proposed SARS service quality model. SARS should therefore focus its service improvement strategies on four of the five service determinants, for the short term at least, and only then focus on tangibles. Apart from the service attributes already listed, no other service attribute attracted more than 100 negative or positive responses.

7.4.3.2 Results per business process

The proposed service quality model and the ranking of the different service attributes are very important, but as the business process approach was identified as suitable for the present research, it is also necessary to analyse the responses per business process. Table 7.7 provides a summary of the critical incidents per business process.

Table 7.7: Responses for traditional services per business process

Business process	Negative responses (n = total for business process)	Positive responses (n = total for business process)	Total responses	Percentage (%) (n = 4 183)
General business processes	252 (70.79%)	104 (29.21%)	356	8.51
Tax registrations	240 (83.33%)	48 (16.67%)	288	6.89
Queries	129 (70.88%)	53 (29.12%)	182	4.35
Dispute resolution process	81 (76.42%)	25 (23.58%)	106	2.53
Tax assessment	68 (73.91%)	24 (26.09%)	92	2.20
Tax refunds	47 (67.14%)	23 (32.86%)	70	1.67
Returns	45 (67.16%)	22 (32.84%)	67	1.60
Updating of details	53 (81.54%)	12 (18.46%)	65	1.55
Tax payments	19 (59.38%)	13 (40.62%)	32	0.77
Tax clearance	26 (100%)	0 (0%)	26	0.62
Tax amnesty process	3 (100%)	0 (0%)	3	0.07
Deregistrations	3 (100%)	0 (0%)	3	0.07
Electronic tax payments	2 (100%)	0 (0%)	2	0.05

Apart from the critical incidents that related to business processes in general, the only business process that attracted more than 5% of the total number of critical incidents was the tax registration business process, with 288 critical incidents (6.88%, n = 4 183) that related to it. Of these critical incidents, 16.67% were positive and 83.33% were negative. The speed of performing the tax registrations was the service attribute that received the highest number of responses for this business process, namely 149 critical incidents (51.74%, n = 288). The second most important service attribute for the tax registration business process was the accuracy of performing the service, which attracted 49 critical incidents (17.01%, n = 288). The third most important service attribute and the only other service attribute that attracted more than 10% of the responses was the user-friendliness of the tax registration business process, with 45 critical incidents (15.63%, n = 288) allocated to it.

As registration is a taxpayer's first step towards becoming tax compliant, it is crucial for this process to be streamlined, efficient and, above all, simple and quick. Many taxpayers would be willing to pay their taxes, but experience the process of registration as complex, time-consuming and cumbersome (Citizen Surveys, 2008). Smulders and Stiglingh (2008:10) regard the tax registration process as one of the priority areas on which SARS should focus in the process of broadening the tax base to ensure that taxpayers who are willing to pay their taxes can in fact do so. Smulders and Stiglingh (2008:10) also suggested that registration for tax (all taxes) should be straightforward and quick. Forms should be simple, short and easy to read. Immediate processing of information and receipt of a registration number should be the performance standard.

Since the data for the present research was gathered, SARS (2008c) has already introduced a simplified and quicker registration process for the registration for VAT. The new system of VAT registrations even provides for the option of the immediate receipt of a VAT registration number. Of the 288 responses that related to tax registrations in the present research, 80 specifically related to the VAT registration process. The remaining 208 responses related to the other tax registrations, including income tax or the PAYE tax registrations. No similar measures for the other tax registrations have been introduced to date to either simplify the registration process or to enhance the speed of delivering the service.

Apart from the tax registrations already analysed above, no other business process attracted more than 5% of the total number of responses.

7.4.3.3 Results per service channel

The services rendered by the various business processes at SARS are delivered through various service channels. The results of the present research per service channel may also assist SARS to prioritise service strategies. They are presented in Table 7.8 below.

Table 7.8: Responses for traditional services per service channel

Service channel	Negative responses (n = total for service channel)	Positive responses (n = total for service channel)	Total responses	Percentage (%) (n = 4 183)
Call centre	580 (67.29%)	282 (32.71%)	862	20.61
General service channels	450 (53.83%)	386 (46.17%)	836	19.99
Branch	402 (59.64%)	272 (40.36%)	674	16.11
E-mail	100 (53.48%)	87 (46.52%)	187	4.47
Fax	50 (76.92%)	15 (23.08%)	65	1.55
Postal	46 (82.14%	10 (17.86%)	56	1.34
Text messaging	7 (36.84%)	12 (63.16%)	19	0.45

The call centre is the service channel that attracted the highest number of responses: 862 critical incidents (20.61%, n = 4 183), of which 32.71% were positive and 67.29% were negative. The call centre is thus currently regarded as the most important service channel SARS uses. The knowledge of employees was regarded as the most important service attribute for the call centre service channel, with 211 critical incidents (24.48%, n = 862). The waiting time before being provided with the required service was regarded as the second most important service attribute for the call centre, with 149 critical incidents (17.29%, n = 862). The accuracy of service performance service attribute attracted 127 critical incidents (14.73%, n = 862). If it is assumed that the knowledge of the employees directly affects the accuracy of the service SARS delivers through the call centre, then the responses on accurate service delivery could be added to the knowledge of employee service attribute and would then place even more emphasis on the knowledge of the employees operating the call centre. The willingness of the employees to provide the required service to tax practitioners at the call centre is the only other service attribute that attracted more than 10% of the responses that related to the call centre, with 98 critical incidents (11.37%, n = 862).

The second most important service channel was the branches, with 674 critical incidents (16.11%, n = 4 183) allocated to it, of which 40.36% were positive and 59.64% were negative. Of the total responses that related to the branch as a service channel, waiting time before being attended to was regarded as the most important service attribute, with

153 critical incidents (22.7%, n = 674). The willingness of the employees to assist the tax practitioners was regarded as the second most important service attribute for the branch service channel, with 111 critical incidents (16.47%, n = 674) allocated to it. The knowledge of the employees was again regarded as important, but not as important as the waiting time and willingness of employees service attributes. The knowledge of the employees assisting tax practitioners at branches attracted 79 critical incidents (11.72%, n = 674). It was the only other service attribute that received more than 10% of the total responses that related to the branch service channel.

All the other service channels (that is the e-mail, fax, post and text messaging) attracted a very low number of responses (less than 5%). Although the e-mail service channel was regarded as the third most important service channel, it attracted only 187 critical incidents (4.47%, n = 4 183). It is also clear from the responses that the two service channels that were relied on most heavily in the past, namely fax and the postal service channel, have decreased in importance, with only 65 critical incidents (1.55%, n = 4 183) allocated to the fax service channel. The postal service channel attracted 56 critical incidents (1.33%, n = 4 183). Both the fax and the postal service channels attracted a high number of negative responses, namely 76.92% for the fax and 82.14% for the postal service channel.

As the text messaging service channel is only available for communication from SARS to the tax practitioners and not the other way around, it is understandable that it would not be regarded as very important by the responding tax practitioners.

Although the accurate service delivery was regarded as the most important service attribute with regard to the service quality of SARS, the accurate service delivery related mainly to the business processes. For the service channels, the knowledge of the employees was clearly regarded overall as the most important service attribute, followed closely by waiting time and the willingness of employees service attributes in second and third place.

7.5 TRADITIONAL SERVICES: VALIDATING THE PROPOSED SERVICE QUALITY MODEL

7.5.1 Introduction

The outcome of the present research (a "lens of the customer" that has been built by identifying service determinants and service attributes relevant to tax practitioners' evaluation of tax agency e-services) is unique. Thus far, no similar research model exists that was specifically developed for tax agencies. There was therefore no source of comparison to provide any kind of benchmark or to assist in evaluating the reliability and validity of the proposed service quality model.

The final service determinants identified in the present research have much in common with the service determinants identified for the SERVQUAL service quality measuring instrument developed by Parasuraman *et al*. (1986, 1988) and Parasuraman *et al*. (1991a). Therefore, an investigation of SERVQUAL as a generic service quality model could provide additional evidence of the need for or validity of categorising service quality factors into the different dimensions (the originators of SERVQUAL referred to this as the "dimensionality") of the five-factor service determinants in the service quality model proposed in the present research, as well as the reliability of the proposed instrument.

7.5.2 Analysis of SERVQUAL as an instrument

Before a detailed comparison between SERVQUAL and the proposed model can be made, the applicability of the SERVQUAL scale as the benchmark must be evaluated. Once it has been established that SERVQUAL serves as a benchmark, the reliability and validity of the SERVQUAL instrument can be investigated, as this will have a direct impact on the possible reliability and validity of the proposed service quality model.

A number of researchers have already commented on SERVQUAL. The primary aspect of debate has been the dimensionality of the instrument. Some authors, such as Richard and Allaway (1993:61) and Vos (2003:102) found that SERVQUAL was widely accepted as a robust categorisation of the determinants of service. Other authors, for example, Donnelly and Shiu (1999:498), have questioned the distinctness of SERVQUAL's five-factor structure. Cronin and Taylor (1992:7) and Dabholkar *et al*. (2000:141) have even

suggested that service quality is a unidimensional construct. Parasuraman *et al*. (1994:113) defended their instrument, maintaining that every argument presented by Cronin and Taylor (1992) on the dimensionality of SERVQUAL is questionable. The general consensus among researchers such as Brady and Cronin (2001), Grönroos (1984, 1988), Gummesson (1992), Kang and James (2004), Philip and Hazlett (1997), Rust and Olivier (1994) and Rust *et al*. (1995), however, is that service quality is, in fact, multidimensional.

The originators of the instrument, Parasuraman *et al*. (1988), conducted a factor analysis to determine the dimensionality of SERVQUAL. Orwig, Pearson and Cochran (1997:8) suggested that, rather than relying solely on factor analysis (which is used to evaluate the dimensionality of SERVQUAL), customers could classify the SERVQUAL items into the determinants according to the content of each item. The proportion of customers "correctly" classifying the items into the five determinants could reflect the degree to which the dimensions are distinct. Parasuraman *et al*. (1991a) recommend that the use of such a technique while pre-testing each application of SERVQUAL would be prudent. Parasuraman *et al*. (1988) and Parasuraman *et al*. (1991a) found that the reliabilities and factor structures indicate that SERVQUAL's five service determinants have sound and stable psychometric properties. Parasuraman *et al*. (1991a:440) also found that, at a general level, the five-dimensional structure of SERVQUAL serves as a meaningful conceptual framework for summarising the criteria customers use when assessing service quality.

The purpose of measuring the service quality of SARS (based on the proposed service quality model) is to have an impact on the services rendered by SARS to ensure optimum service quality. There is consensus that SERVQUAL measures service quality from the customer's perspective (in this way also focusing on being the "lens of the customer"). A number of researchers, such as Donnelly, Wisniewski, Dalrymple and Curry (1995:20), Philip and Hazlett (1997:264) and Schneider and White (2004:48) claim that, from a practical point of view, the various dimensions in SERVQUAL have diagnostic value. Interpreting the results of a SERVQUAL survey would therefore allow management to gain a better understanding of how its services could be improved in the customers' view (Badri *et al*. 2005:843). Because the present research is influenced by the SERVQUAL model, that suggests that those performing the important task of identifying service shortfalls and

improving services would benefit from a survey based on the proposed service quality model. This would, in all likelihood, allow managerial judgement to be exercised, based on real information and knowledge rather than on mere surmise.

The diagnostic value of SERVQUAL is not valid for the private sector only. Foster and Newman (1998), Wisniewski and Donnelly (1996:5) and Wisniewski (2001a:996) are of the opinion that the use of the SERVQUAL instrument has considerable potential for managers and other decision-makers in a public sector organisation who seek rigorous service quality measures.

Apart from concerns about the dimensionality of SERVQUAL, some researchers, such as Kang and James (2004), Philip and Hazlett (1997), Philip and Stewart (1999) and Richard and Allaway (1993), maintain that, as it stands, the five dimensions of service quality embodied in SERVQUAL may not constitute a totally adequate instrument with which to assess the perceived quality of all services (thereby raising the question of the content validity of SERVQUAL). These researchers suggest that SERVQUAL may be inadequate in some respects, because they found that the SERVQUAL dimensions do not measure the technical quality of services, the “service outcome”. However, while they do express the view that SERVQUAL does not fully measure service quality, Philip and Hazlett (1997) nevertheless acknowledge SERVQUAL’s significance and agree that “SERVQUAL’s impact in the service quality domain is undeniable”. Similarly, while Cronin and Taylor (1992:4) question the dimensionality of SERVQUAL, they conclude that the SERVQUAL scale appears to define the domain of service quality adequately. The results of the present study (see Section 5.9.1) also confirm that SERVQUAL evaluates aspects of both functional and technical quality. It should be borne in mind that, while in most cases a service would give rise to only one service output, various service processes all contribute to that output. It would thus make sense that, in both SERVQUAL and the model proposed in the present research, the service process aspect of a service would receive more emphasis than the service output.

The originators of SERVQUAL, Parasuraman, Zeithaml and Berry, also addressed the validity of the scale (Parasuraman *et al*. 1988; Parasuraman *et al*. 1991a). They first assessed the construct validity of the scale by assessing the content validity qualitatively (does the scale appear to measure what it is supposed to measure?) and found, firstly, that the thoroughness with which the construct of the scale has been explicated and,

secondly, the extent to which the scale items represent the construct's domain, confirmed SERVQUAL's content validity. Bakabus and Boller (1991) confirmed the content (face) validity of SERVQUAL. Parasuraman *et al*. (1988) and Parasuraman *et al*. (1991a) then empirically confirmed SERVQUAL's convergent validity. Parasuraman *et al*. (1991b:432) found that the high reliability and consistent factor structure of SERVQUAL across five independent samples also support the scale's trait validity.

Another aspect of SERVQUAL that has been criticised is the dimensionality as a function of the type of service industry, in other words, the relationship between expectations and the importance of the various service determinants in different service industries (Carman 1990; Cronin & Taylor 1992). The revised SERVQUAL model (Parasuraman *et al*. 1991a) addressed this issue with the addition of the five importance measurement scales at the end of the instrument.

SERVQUAL scales have been extensively cited, tested and successfully adopted in various contexts (Connolly & Bannister 2008:314; Nomdoe & Pather 2007:99; Schneider & White 2004:60). Various researchers, such as Babakus and Boller (1991), Badri *et al*. (2005:843), Carman (1990) and Richard and Allaway (1993:61) have assessed and confirmed the scale's reliability and validity. The originators of SERVQUAL, Parasuraman *et al*. (1988) and Parasuraman *et al*. (1991a), personally performed tests on the SERVQUAL scale and confirmed its reliability, validity and factor structure across various independent samples (1988 – four independent samples; 1991 – five independent samples).

Although there is not complete consensus among researchers, there are strong arguments that underpin the reliability and validity of the SERVQUAL instrument as a generic service quality evaluation instrument. It should, however, be determined whether SERVQUAL is applicable in both the private and the public sectors.

Orwig *et al*. (1997:1) concluded that SERVQUAL (as it stands, without adaptations) is not necessarily suitable for measuring service quality in the public sector. However, Orwig *et al*. (1997:8) qualified this conclusion by acknowledging that further research would be necessary to determine whether the failure of SERVQUAL in the specific environment in which they conducted their research (the Air National Guard) applied only to the Air National Guard or whether it was symptomatic of the public sector as a whole. Perhaps the

instrument's failure could be explained by the possibility that the military organisation and culture itself created perceptions of service quality that differed significantly from those of civilian respondents (Orwig *et al*. 1997:8). Other researchers, such as Curry and Stirling (2002), Foster and Newman (1998) and Wisniewski (2001a, 2001b) successfully applied SERVQUAL and adaptations of SERVQUAL in the public sector. Curry and Stirling (2002) and Wisniewski (2001a, 2001b) confirmed the potential usefulness and relevance of SERVQUAL in the public sector context to determine consumer priorities and measure service performance.

The global applicability of SERVQUAL has been questioned. Donnelly and Shiu (1999:498) are of the opinion that, although the SERVQUAL approach has been rigorously developed and tested for the North American sector services, the application of their approach to different service contexts (particularly the British public sector) must be anchored by similarly rigorously tested and validated models. They maintain, moreover, that it is vital to develop the survey instrument from the perspective of both the deliverer and the recipient. Notwithstanding, the user-based approach of quality was found to be predominantly suitable for this study, and the results reached by Donnelly and Shiu (1999) should be considered in this context.

Curry and Stirling (2002:197) tested the hypothesis of the applicability of the SERVQUAL model to the public sector. In their research, they used the model to assess the quality of three different types of physiotherapy service provision in Dundee, Scotland. Wisniewski (2001a, 2001b) successfully applied SERVQUAL to test the service quality of the Scotland Accounts Commission. As the studies of both Wisniewski (2001a, 2001b) and Curry and Stirling (2002) were successfully conducted outside the Northern American sector, in a context probably more typical of the British environment generally, that is, the Scottish public sector, it should address the concerns of Donnelly and Shiu (1999) that SERVQUAL may be applicable only to the Northern American sector.

It appears that there is strong evidence that SERVQUAL is a reliable instrument, but it is also necessary to determine what the effect of modifications to the model may be. The originators of SERVQUAL, Parasuraman *et al*. (1986, 1988) and Parasuraman *et al*. (1991a), aimed to develop a generic service quality model, but it has been acknowledged that SERVQUAL does not appear to be universally applicable to all situations without modification (Schneider & White 2004:33). Even Parasuraman *et al*. (1988), and

Parasuraman *et al*. (1991a) agree that appropriate adaptation of the instrument may be desirable when only a single service provider (as is the case in the present research) is to be investigated.

7.5.3 Comparison of the proposed model with SERVQUAL

There is strong evidence that SERVQUAL is a reliable generic instrument with a high degree of validity that could be applied globally in both the private and the public sectors. It has also been demonstrated that it is desirable to modify the instrument when only a single service provider is to be investigated. The proposed service quality model is now compared in principle with the SERVQUAL model. As the present research follows the business process approach advocated by Rust *et al*. (1995), the proposed items in the service quality model are focused on business processes or service channels. They are consequently not as generic as those included in SERVQUAL. To facilitate a useful comparison between the service aspects in the present research and those in SERVQUAL, the detailed items in the SERVQUAL instrument are compared with the service attributes of the model proposed in the present research. Table 7.9 provides a detailed comparison of the SERVQUAL instrument with the proposed model for measuring SARS's service quality. The results of the comparison are explained below.

Firstly, it must be noted that both SERVQUAL and the present research propose five service determinants in evaluating service quality. Although the names and general meaning of the service determinants are the same, the definitions of the determinants for the present research differ from those used by SERVQUAL in some cases. They are, for the most part, broader (refer to Table 7.9). Parasuraman *et al.* (1991a) recommend that reference to the service determinants should be excluded from the survey instrument. The present research also recommends this approach when the model is converted into a survey instrument.

The order in which the items in the service quality models are presented also differs. In the present research, the items are listed per service determinant, arranged in descending order from the service determinant that received the most responses to the one that received the fewest. The service attributes within each service determinant were similarly presented in descending order depending on the frequency of the responses. No specific

order is used in SERVQUAL. Differences in the order in which items are presented in the separate models should not unduly influence the validity or reliability of the instruments.

The remaining comparisons between the two models are analysed in the following sections:

- SERVQUAL items not included in the proposed model (see Section 7.5.3.1);
- SERVQUAL items combined in the proposed model (see Section 7.5.3.2);
- modifications of SERVQUAL items (see Section 7.5.3.3);
- items in both scales that agree in principle (see Section 7.5.3.4); and
- additional service aspects not mentioned in SERVQUAL (see Section 7.5.3.5).

7.5.3.1 SERVQUAL items not included in the proposed model

Certain items in the SERVQUAL model were not included in the proposed service quality model. According to Parasuraman *et al.* (1991a), such a change could affect the integrity of the scale. Apart from items listed in the tangibles section in SERVQUAL, all the other items listed in the other service determinants (reliability, responsiveness, assurance and empathy) encompassed service aspects that agreed, for the most part, with the SERVQUAL model.

The tangibles determinant in SERVQUAL contains only two items that are not addressed in the service quality model proposed in the present research, namely P3: “XYZ’s employees are neat appearing” (*sic*) and P4: “Materials associated with the service … are visually appealing at XYZ”. The exclusion of these items was based on the responses from the participating tax practitioners, as no responses specifically, or even by implication, referred to these items. Although the SERVQUAL model as a whole was found to be relevant to the public sector, a few individual items in the instrument were not. This could be explained by the fact that SARS is in the public sector, not the private sector, suggesting that these particular items are not relevant to tax practitioners. On the other hand, it is possible that the current level of these two service aspects was found to be acceptable, so that they were not even considered by the respondents.

The limited relevance of tangibles in the present research (see Section 5.5.1) also indicates that this aspect is not very important to tax practitioners, who are more

concerned with the outcome of the services provided than with the appeal of the equipment, employees or materials. It is recommended that these two items be excluded from the current proposed model. For the sake of the continued integrity of the proposed model, the two items should, however, be re-evaluated with every actual evaluation of the service quality.

Only two items out of the 22 items in SERVQUAL have not been addressed at all in the proposed service quality model, namely P3: “XYZ’s employees are neat appearing” (*sic*) and P4: “Materials associated with the service … are visually appealing at XYZ”. As stated, both these items relate to the tangibles service determinant.

It is proposed in the present research that the frequencies of the responses should be used (see Section 5.2.2) as a measure to determine importance. While it is acknowledged that the importance of each service determinant is bound to differ, according to individual tax practitioners, the proposed service quality model does not provide for any additional importance ratings. To account for the idea that different service determinants might vary in importance to different people, Parasuraman *et al*. (1991a) recommended assigning importance weights to each of the service quality determinants in the analyses. The measure of importance used by these authors entails asking respondents to divide 100 points among their five determinants, assigning more points to the determinants they consider to be more important. Cronin and Taylor (1992) and Teas (1993) applied the importance weighting proposal of Parasuraman *et al*. (1991a) and asked respondents to rate the importance of the different SERVQUAL items. Neither of these studies found any advantage in weighting item scores according to importance ratings to improve the ability of the scale to predict a rating of overall service quality. Parasuraman *et al*. (1994:115) criticised the findings of Cronin and Taylor (1992). Schneider and White (2004:50) argued that including item importance ratings may increase the procedural burdens of administering service quality surveys without adding any significant results. It therefore appears to be appropriate that the proposed service quality model does not include any separate measurement of importance.

7.5.3.2 SERVQUAL items combined in the proposed model

A number of other items in the service quality model proposed in the present research did not exclude SERVQUAL items, but instead combined two SERVQUAL items into single or multiple items.

No items were combined in the tangibles determinant. The first combination of items related to the reliability determinants in SERVQUAL's Items P5 and P8. P5 evaluates the statement "When XYZ promises to do something by a certain time, it does so", while P8 evaluates the statement "XYZ provides its services at the time it promises to do so". The present research combines SERVQUAL's Items P5 and P8, but the measurement of some aspects is proposed in all the service determinants in which specific promises relating to the service attribute are classified. The reason for including more than one statement that evaluates adherence to this service aspect is that SARS promises individual service delivery time frames for each of the services it offers. Because the business approach has been used in the development of the proposed model, the results should identify the areas in which SARS has to improve. A general evaluation will not give that result.

The reliability service determinant in SERVQUAL's Item P9 ("XYZ insists on [an] error-free record"), has also not been addressed separately in the present research. Responses relating to SERVQUAL's Item P9 have been incorporated into the accurate service delivery service attribute as error free records that will contribute to accurate service delivery. The accurate service delivery service attribute has been subdivided into various service aspects that will also contribute to the evaluation of the "error free records" principle.

The responsiveness service determinant in SERVQUAL's Item P13 ("Employees of XYZ are never too busy to respond to your requests") has not been addressed separately in the present research, as it was never specifically mentioned by respondents. It can therefore be assumed that the availability of SARS employees directly affects tax practitioners' perceptions when it comes to the SARS employees' willingness to assist.

In the empathy service determinant, the present research combines SERVQUAL's Items P20 ("XYZ has employees who give you personal attention") and P22 ("Employees of XYZ understand your specific needs"). Both these aspects have been addressed under the

adaptability service attribute, which is in turn subdivided into different relevant service aspects.

No combination of items was relevant to the assurance service determinant. It should be noted that the combination of the other items in the SERVQUAL model does not exclude any service aspect to be evaluated.

7.5.3.3 Modifications of SERVQUAL items

The originators of SERVQUAL, Parasuraman *et al*. (1991a), maintain that minor modifications to the wording of items to adapt them to a specific setting are appropriate and should not affect the integrity of the scale. The wording of some items in the proposed model has been adapted or there are other minor modifications adjusting the items specifically to the SARS context. Assuming that items would require modification for suitability in the tax agency environment, wording changes that only adapt the items to the SARS context have not been included in this discussion. Only the changes that alter the focus of a specific service item so that the items are not identical in both models are analysed here.

In the tangibles determinant, respondents in the present research specifically commented on the visual appeal of equipment used by SARS. SERVQUAL's Item P1 determines whether the evaluated entity has equipment that looks up-to-date or "modern". This aspect was not relevant to the responding tax practitioners in the present research. This may be because, for the most part, they only have access to the "front office" or the contact employees. Even though the front office employees usually have computers, tax practitioners could not really evaluate the appeal of the equipment used by SARS. In fact, the appeal was never mentioned, but the effectiveness of the sound quality in the call centre attracted comments.

In the reliability service determinant, the present research does not specifically address SERVQUAL's Item P6, which currently reads: "When you have a problem, XYZ shows a sincere interest in solving it". However, problems would probably occur only when first-time service delivery was not successful. The service recovery service aspect specifically addresses this issue.

In SERVQUAL's responsiveness service determinant, Item P10 reads as follows: "Employees of XYZ tell you exactly when services will be performed". Although this item has been included in the present research, it focuses not only on the time aspect but also on adherence to promised actions. In the present research, the evaluation of this service aspect is classified under reliability rather than responsiveness.

Two items in SERVQUAL's assurance determinant required modification in the proposed service quality model. First, the assurance determinant in SERVQUAL's Item P14 states: "The behaviour of employees of XYZ instills confidence in customers". The wording has been modified. The present research focuses on whether the operational **processes** are able to inspire trust and confidence, whereas SERVQUAL's Item P14 focuses on whether the **employees' behaviour** inspires trust and confidence. An item dealing with consistency has been added in the present research. It could be argued that consistent actions by employees would contribute to instilling confidence in tax practitioners, which is in partial agreement with SERVQUAL's Item P14. Secondly, the present research split SERVQUAL's Item P15 ("You feel safe in your transactions with XYZ") into two different items, physical safety and confidentiality. The evaluation of both the items together in the present research would, in all probability, evaluate the same construct as SERVQUAL's Item P15.

In the empathy service determinant, the service attributes in the present study of waiting time, communication, user-friendliness, one-stop service, assistance and convenience of location all contribute to the evaluation of whether the service provider has the best interests of the tax practitioner at heart. Combined, they would evaluate the same construct as SERVQUAL's Item P21.

7.5.3.4 Items in both scales that agree in principle

Seven of the SERVQUAL items (P2, P7, P11, P16, P17, P18 and P19) compare very closely with items in the proposed service quality model, without material modifications.

7.5.3.5 Additional service aspects not mentioned in SERVQUAL

The additional aspects included in the service quality model of the present research that were not specifically addressed in SERVQUAL can be classified as relating to either structural dimensional aspects or detailed service aspects.

(a) Structural dimensional aspects

The present research included service dimensions as an additional higher order classification of the service quality model. The detailed service attributes of the various service determinants were then classified in these dimensions. The dimensions are the technical dimension, the functional dimension and the image dimension. The higher order dimensionality classification contributes to the analysis and understanding of the service quality construct, but did not compromise the diagnostic value achieved from analysing service quality per determinant, as is done in SERVQUAL.

(b) Detailed service aspects

No concerns have been raised by researchers on the addition of items to a service quality scale. The following additional items have been included in the proposed service quality model, but they were not relevant to the SERVQUAL model.

Firstly, the adherence to specific promises service attribute comprises Conclusion 5.54, which is not addressed in the SERVQUAL model. It reads as follows:

Conclusion 5.54:
Under the assurance service determinant, the service quality model should provide for a question to determine whether tax practitioners are always informed of the required actions and due dates in order for them to fulfil their tax obligations.

As service providers in general do not usually impose legal obligations on a customer, it is understandable that this service aspect would not be relevant to a generic service quality model. As SARS legally imposes actions and due date requirements on tax practitioners, the certainty relating to these actions and due dates was relevant to the tax agency environment.

Secondly, the adherence to promises in general service attributes under the reliability service determinant (see Section 5.11.5) includes Conclusion 5.56, which reads as follows:

Conclusion 5.56:
Under the reliability determinant, the service quality model should include a question to determine whether tax practitioners perceive SARS to be abiding by its own code of conduct. The first part of the question should be a closed-ended question with the different levels of agreement as answer options. To assist SARS to identify problem areas, it may be useful to include an open-ended question eliciting a reason why a tax practitioner answered in the negative. An alternative would be to list the values referred to and to ask to what degree SARS adheres to them. In the latter case, a qualitative question can be avoided, but the questionnaire would be longer.

The adaptability service determinant under the empathy service determinant (see Section 5.10.3) includes Conclusion 5.39, which reads as follows:

Conclusion 5.39:
Under the empathy service determinant, the service quality model should include a question to evaluate whether tax practitioners perceive SARS as dynamic and as continuously striving to improve its service offerings.

No items referring to the code of conduct or the dynamism of the service provider are specifically included in the SERVQUAL scale. These items in the proposed model could be regarded as closely relating to what Grönroos (1988:13) refers to as the reputation and credibility service dimension, which is image-related. Grönroos (1988:13) is of the opinion that the reputation and credibility service dimension fulfils a filtering function. An evaluation of SARS's adherence to its code of conduct and the dynamism of SARS could be regarded as evaluating, in a sense, its reputation and credibility. These are the only items in the proposed service quality model that relate to the image dimension of service quality.

7.5.2 Conclusion: reliability and validity of the proposed model for the traditional services

Only two items listed in the SERVQUAL scale (P3 and P4) have been excluded completely from the proposed service quality model. Seven items in SERVQUAL (P2, P7, P11, P16, P17, P18 and P19) agree in principle with service attributes in the proposed model. A further six items in SERVQUAL are found in the proposed service quality model, but with modifications (P1, P6, P10, P14, P15 and P21). Another six items in SERVQUAL have been combined into only three different service attributes (P5 and P8, P12 and P13, P20 and P22) in the proposed model. One item was absorbed into another service quality attribute in the proposed model (P9 was incorporated with P7).

The result is that approximately 16 of the 22 (72.73%, n = 22) items listed in SERVQUAL have been evaluated in much the same way in the proposed service quality model (seven items that agree in principle, six items with modifications and six items combined into three items). The underlying principles of four items (18.18%, n = 22) in SERVQUAL (six items combined into three items, plus one item incorporated into another item) have also been evaluated, but not necessarily as separate items in the proposed service quality model. Only two items (9.09%, n = 22), namely P3 and P4, have been completely excluded from the proposed service quality model. It can therefore be concluded that the proposed model agrees in all material respects with the generic SERVQUAL model, which would support the content validity of the proposed service quality model.

Table 7.9: Comparison of proposed traditional service quality model with SERVQUAL

SERVQUAL	PRESENT RESEARCH	COMPARISON OF PRESENT RESEARCH WITH SERVQUAL	RESULT OF COMPARISON
Tangibles	**Tangibles** (Section 5.12)	Tangibles service determinant in both models.	Agrees in principle
P1. XYZ has modern-looking equipment.	Sound quality of the call centre (Section 5.12.2 – Conclusion 5.60)	The present research focuses on the effectiveness of equipment and not appearance, giving rise to a rewording of SERVQUAL's Item P1.	Modification
P2. XYZ's physical facilities are visually appealing.	Physical facilities (Section 5.12.1 – Conclusion 5.59)	The present research agrees with SERVQUAL's Item P2.	Agrees in principle
P3. XYZ's employees are neat-appearing (*sic*).	*Not applicable*	SERVQUAL's Item P3 is not addressed in the present research.	Items deleted
P4. Materials associated with the service (such as pamphlets or statements) are visually appealing at XYZ.	*Not applicable*	SERVQUAL's Item P4 is not addressed in the present research.	Items deleted
Reliability	**Reliability** (Section 5.11)	Reliability service determinant in both models	Agrees in principle
P5. When XYZ promises to do something by a certain time, it does so.	Adherence to specific promises made by SARS (Section 5.11.4)	The present research combines SERVQUAL's Items P5 and P8, but the measurement of detailed aspects is proposed throughout all the different service determinants in which the service attribute to which specific promises relate is classified.	Combination
P6. When you have a problem, XYZ shows a sincere interest in solving it.	Service recovery (Section 5.9.1.1 – Conclusion 5.17 and Section 5.11.1.2 – Conclusion 5.51)	The present research does not specifically address SERVQUAL's Item P6, but problems would probably only occur when there is no accurate first-time service delivery, and the service recovery service aspect specifically addresses this issue.	Modification
P7. XYZ performs the service right the first time.	Accurate service delivery (Section 5.11.1 – Conclusions 5.49, 5.50, 5.52 and 5.53)	The present research agrees with SERVQUAL's Item P7. The present research includes service recoveries, service failures and loss of documents service aspects. SERVQUAL does not include them.	Agrees in principle

P8. XYZ provides its services at the time it promises to do so.	Adherence to specific promises made by SARS (Section 5.11.4)	The present research combines SERVQUAL's Items P5 and P8, but the measurement of detailed aspects is proposed throughout all the different service determinants where the service attribute to which specific promises relate is classified.	Combination
P9. XYZ insists on error-free records.	*Not specifically separately addressed*	For the present research, the responses that relate to SERVQUAL's Item P9 are incorporated into the accurate service delivery service attribute, as error-free records would contribute to accurate service delivery.	Combination
Responsiveness	**Responsiveness** (Section 5.8)	Responsiveness service determinant in both models.	Agrees in principle
P10. Employees of XYZ tell you exactly when services will be performed.	Adherence to promises in general (Section 5.11.5 – Conclusion 5.57), under the reliability service determinant and not classified under the responsiveness service determinant	The present research agrees with SERVQUAL's Item P10, in that it focuses on the adherence to promises of employees. The present research focuses not only on the time aspect but also on adherence to promises.	Modification
P11. Employees of XYZ give you prompt service.	Speed of performing the service (Section 5.8.1 – Conclusions 5.6 – 5.14)	The present research agrees with SERVQUAL's Item P11, but focuses in detail on all the different business processes and relevant service channels.	Agrees in principle
P12. Employees of XYZ are always willing to help you.	Willingness of employees (Section 5.8.2 – Conclusion 5.15)	The present research combines SERVQUAL's Items P12 and P13 into one service attribute.	Combination
P13. Employees of XYZ are never too busy to respond to your requests.	*Not specifically separately addressed*	The present research combines SERVQUAL's Items P12 and P13 into one service attribute (willingness of employees), as it is assumed that the availability of employees directly affects the tax practitioners' perceptions of the employees' willingness to assist the practitioners.	Combination

Assurance	**Assurance** (Section 5.9)	Assurance service determinant in both models	Agrees in principle
P14. The behaviour of employees of XYZ instills confidence in customers.	Administration of the operational process (Section 5.9.3 – Conclusions 5.20, 5.21 and 5.22) Consistency (Section 5.9.4 – Conclusions 5.23 and 5.24)	The present research focuses on the ability of the operational processes to inspire trust and confidence, whereas SERVQUAL's Item P14 focuses on whether the behaviour of the employees inspires trust and confidence. An item dealing with consistency has been added in the present research. It could be assumed that consistency of employees' actions would instil confidence in tax practitioners. This partly agrees with SERVQUAL's Item P14.	Modification Addition
P15. You feel safe in your transactions with XYZ.	Physical safety (Section 5.9.5 – Conclusion 5.24) Confidentiality (Section 5.9.6 – Conclusion 5.25 and Section 5.11.4 – Conclusion 5.55)	The present research splits SERVQUAL's Item P15 into two different items (physical safety and confidentiality). The evaluation of both the items in the present research, in combination, probably evaluates the same as SERVQUAL's Item P15.	Modification
P16. Employees of XYZ are consistently courteous to you.	Politeness and friendliness of employees (Section 5.9.2 – Conclusion 5.19)	The present research agrees with SERVQUAL's Item P16.	Agrees in principle
P17. Employees of XYZ have the knowledge to answer your questions.	Knowledge of employees (Section 5.9.1 – Conclusion 5.16).	The present research agrees with SERVQUAL's Item P17. An additional item (Conclusion 5.18) has also been included in the present research, assuming that not only should the knowledge of the contact employees be evaluated but specifically the knowledge of the employees responsible for one of the business processes (the dispute resolution process) should be examined.	Agrees in principle

Empathy	**Empathy** (Section 5.10)	Empathy service determinant in both models.	Agrees in principle
P18. XYZ gives you individual attention.	Adaptability (Section 5.10.3 – Conclusions 5.41 and 5.42)	The present research agrees with SERVQUAL's Item P18, but deals with more detailed individual requests from tax practitioners.	Agrees in principle
P19. XYZ has operating hours convenient to all its customers.	Convenience of operating hours (Section 5.10.8 – Conclusion 5.48)	The present research agrees with SERVQUAL's Item P19.	Agrees in principle
P20. XYZ has employees who give you personal attention.	Adaptability (Section 5.10.3 – Conclusion 5.40)	The present research combines SERVQUAL's Items P20 and P22.	Combination
P21. XYZ has your best interests at heart.	Waiting time (Section 5.10.1 – Conclusions 5.26 and 5.27) Communication (Section 5.10.2 – Conclusions 5.28 – 5.38) User-friendliness of documentation and business processes (Section 5.10.4 – Conclusion 5.43) One-stop service (Section 5.10.5 – Conclusions 5.44 and 5.45) Assistance (Section 5.10.6 – Conclusion 5.46) Convenience of location (Section 5.10.7 – Conclusion 5.47)	The waiting time, communication, user-friendliness, one-stop service, assistance and convenience of location service attributes in the present study all contribute to the evaluation of whether the service provider has the best interests of the tax practitioner at heart and combined would thus evaluate the same as SERVQUAL's Item P21.	Modification
P22. Employees of XYZ understand your specific needs.	Adaptability (Section 5.10.3 – Conclusion 5.40)	The present research combines SERVQUAL's Items P20 and P22.	Combination

7.6 E-SERVICE QUALITY MODEL

In addition to the traditional services it provides, SARS also provides e-services through its website and the e-filing option. As the objective of the present research was to develop a service quality model that can be used to evaluate all the services SARS offers, the quality of both the traditional services and the e-services is relevant. In this section, the service quality model for the e-services is presented.

7.6.1 Proposed e-service quality model

As with the traditional services, it is acknowledged that e-service quality is a multidimensional, hierarchical construct, which means that customers form their service quality perceptions on the basis of an evaluation of performance at multiple levels. The first level is the evaluation of various service attributes in different identified service determinants, the results of which can be combined into the evaluation of different service dimensions.

7.6.1.1 Dimensions in the e-service quality model

Parasuraman *et al*. (2005:220) found that it is advisable to use different dimensions in measuring the service quality of e-services – one dimension for normal operations, another for recovery situations, one for perceived value and another for loyalty intentions. In the present research, three of these four service dimensions were found to be relevant to the measuring of SARS's e-service quality, namely the normal operations dimension (Conclusion 6.5), the assistance dimension (Conclusion 6.3) and the perceived value dimension (Conclusion 6.2). The normal operations dimension of the e-service quality model incorporates all the services that do not form part of the assistance services or perceived value aspects of services SARS renders, but that still relate to the service quality of SARS's e-services. The perceived value dimension is defined as the convenience and incentive benefits of using e-filing. Assistance refers to the availability and efficiency of the assistance with e-services through the telephone, online representatives and electronic aids.

Although the service quality dimensions for the traditional services were interrelated, according to Grönroos (1984:43), no researcher has to date expressed a particular view

with regard to the interrelatedness or importance of the dimensions relevant to the e-services. In evaluating the different service dimensions for the e-services, it appears that the distinction between the normal operations dimension and the assistance service dimension is that these two dimensions measure different types of services. By contrast, the perceived value dimension measures different aspects of normal services, as well as of the assistance services. A summary of the results of the present research per dimension is provided in Table 7.10 below.

Table 7.10: Service quality dimensions for the e-services

Dimension	Negative responses	Positive responses	Total	Percentage (%) n = 1 284
Normal operations dimension	364	515	879	68.46%
Perceived value dimension	45	227	272	21.18%
Assistance dimension	105	28	133	10.36%

As anticipated, the bulk of the responses related to the more routine types of service, with 68.46% of the responses allocated to the normal operations dimension. It therefore appears that the normal operations of the e-services represented by the normal operations dimension were perceived to be the most important dimension. The perceived value dimension, with 21.18% of the responses, was perceived to be the second most important. The assistance dimension, with 10.36% of the responses, was also regarded as important, but not nearly as important as the normal operations dimension and only about half as important as the perceived value dimension.

The importance of the assistance dimension should be evaluated against the background of the study by Parasuraman *et al*. (2005:220), who found that a respondent first has to encounter problems with using a website to require assistance. They also found that approximately one third to half of their respondents did not encounter problems and therefore did not require the services offered in a recovery situation. The results of the present research therefore tended to underestimate the importance of the assistance dimension.

Apart from the total responses per dimension, the responses per dimension were also subdivided into positive and negative responses. The incidence of the positive and negative responses regarding the normal operations dimension is in line with the incidence

of the positive and negative responses for all the e-services. However, it is clear that the responding tax practitioners replied predominantly positively with regard to the perceived value aspects and predominantly negatively with regard to the assistance aspects of the e-services SARS provides.

Unlike the dimensions identified for the traditional services, which should all be evaluated by each respondent who completes a survey evaluating the traditional service quality, the e-service quality model should incorporate a filter to ensure that the questions relating to the assistance service dimension are answered only by those respondents who have actually used these services (Conclusion 6.4).

7.6.1.2 Service determinants for e-services

For each of the three identified service quality dimensions, the relevant service determinants have been identified and also defined for the purposes of the present research. In the normal operations services dimension, four different service determinants were identified, namely fulfilment, efficiency, system availability and security. Table 7.11 presents a summary of the definitions of these service determinants within the normal operations service dimension of the e-services.

Table 7.11: Definitions of service determinants identified for the normal operations dimension of the e-services

Service determinant	Definition for the present research
Fulfilment	Fulfilment relates to • the outcome of the service (the extent to which the services are performed as promised, including speed and accuracy); • reliability and trust of service provider (the extent to which promises are fulfilled); and • item availability (the completeness of the content of the websites, as well as the scope of the services offered).
Efficiency	The ease and speed of accessing and using the site, which also includes the simplicity of the structure and layout of the website.
System availability	The correct technical functioning of the site.
Security	The protection of personal information relating to the taxpayer and the tax practitioner.

The second most important service dimension, namely the perceived value dimension, consisted of only two service determinants: the convenience and incentive service

determinants. The definitions of these service determinants for the e-services provided by SARS are set out in Table 7.12.

Table 7.12: Definitions of service determinants identified for the perceived value dimension of the e-services

Service determinant	Definition for the present research
Convenience	The overall freedom from effort or difficulty of using e-filing.
Incentive	The encouragement SARS provides as a motivation to use the e-services, namely by indirectly assisting tax practitioners to overcome technological readiness barriers.

Four of the five service determinants that were relevant to the traditional services were also relevant to the assistance dimension of the e-services. These four service determinants were reliability, assurance, empathy and responsiveness. The definitions of these four relevant service determinants for the e-services were conceptually the same as for the traditional services, but were sometimes more narrowly defined for the e-services. The definitions as applicable for e-services are presented in Table 7.13.

Table 7.13: Definitions of service determinants identified for the assistance dimension of the e-services

Service determinant	Definition for the present research
Reliability	The ability of SARS employees and systems to perform services accurately.
Assurance	The knowledge and courtesy of employees and the ability of the content of the e-service user-guide to convey trust.
Empathy	The tax practitioners' sense that SARS's call centres are designed and operate so that it is easy to gain access to the service.
Responsiveness	The willingness (including the attentiveness) of employees, as well as the actual timeliness or speed of services performed.

7.6.1.3 Proposed service quality model for the e-services

Based on the knowledge of the various service dimensions and the service determinants arrived at through the present research, the service quality model for the e-services is presented in Table 7.14.

Table 7.14: Service quality model for the e-services

NORMAL OPERATIONS SERVICE QUALITY DIMENSION

Service determinant	Service attribute
Fulfilment	• Scope of services offered o Scope of services offered through e-filing o Completeness of the website • Speed of service performance o Turnaround time o Timeliness of updates • Accurate service delivery
Efficiency	• Ease of use • Organisation • Speed of launching the site and pages • Ease of finding information
System availability	• Pre-testing • Crash and freeze problems
Security	• Protection of personal information • Protection of personal liability of tax practitioner

PERCEIVED VALUE DIMENSION

Service determinant	Service attribute
Convenience	• Time saving • Electronic filing system • Reduction of effort • When I want it • Cost saving • Where I want it
Incentive	• Incentive

ASSISTANCE DIMENSION

Service determinant	Service attribute
Reliability	• Accurate service delivery
Assurance	• Knowledge and skills of employees
Empathy	• Waiting time
Responsiveness	• Speed of performing the service • Willingness of employees

The service quality model presented above is explained further, together with the responses per service determinant and service attribute. Table 7.15 below presents the detailed responses per item included in the service quality model.

Table 7.15: Responses for the e-services per service dimension, service determinant, service attribute and service aspect

	Positive	Negative	Total	Percentage (%) n = 1 284
NORMAL SERVICE OPERATIONS SERVICE QUALITY DIMENSION	**515 58.59%**	**364 41.41%**	**879**	**68.46%**
Fulfilment	***228 56.72%***	***174 43.28%***	***402***	***31.31%***
Scope of services offered	83 44.15%	105 55.85%	188	14.64%
• *Scope of services offered through e-filing*	*58 36.94%*	*99 63.06%*	*157*	*12.23%*
• *Completeness of the website*	*25 80.65%*	*6 19.35%*	*31*	*2.41%*
Speed of service performance	89 60.14%	59 39.86%	148	11.53%
• *Turnaround time*	*84 74.34%*	*29 25.66%*	*113*	*8.80%*
• *Timeliness of updates*	*5 14.29%*	*30 85.71%*	*35*	*2.73%*
Accurate service delivery	56 84.85%	10 15.15%	66	5.14%
Efficiency	***99 61.88%***	***61 38.13%***	***160***	***12.46%***
Ease of use	79 90.80%	8 9.20%	87	6.78%
Organisation	16 35.56%	29 64.44%	45	3.50%
Speed of launching the site and pages	2 13.33%	13 86.67%	15	1.17%
Ease of finding information	2 15.38%	11 84.62%	13	1.01%
System availability	***0 0.00%***	***99 100.00%***	***99***	***7.71%***
Pre-testing	0 0.00%	52 100.00%	52	4.05%
Crash and freeze problems	0 0.00%	47 100.00%	47	3.66%
Security	***8 66.67%***	***4 33.33%***	***12***	***0.93%***
Protection of personal information	8 88.89%	1 11.11%	9	0.70%

Protection of tax practitioner from personal liability	3 100%	0 0%	3	0.23%
General	***180*** ***87.38%***	***26*** ***12.62%***	***206***	***16.04%***
PERCEIVED VALUE DIMENSION	**227** **83.46%**	**45** **16.54%**	**272**	**21.18%**
Convenience	***224*** ***83.90%***	***43*** ***16.10%***	***267***	***20.79%***
Time saving	110 79.14%	29 20.86%	139	10.83%
Electronic filing system	32 84.21%	6 15.79%	38	2.96%
Reduction of effort	26 89.66%	3 10.34%	29	2.26%
When I want it	20 86.96%	3 13.04%	23	1.79%
General	21 100%	0 0%	21	1.64%
Cost saving	9 81.82%	2 18.18%	11	0.86%
Where I want it	6 100%	0 0%	6	0.47%
Incentive	***3*** ***60.00%***	***2*** ***40.00%***	***5***	***0.39%***
ASSISTANCE DIMENSION	**28** **21.05%**	**105** **78.95%**	**133**	**10.36%**
Reliability Accurate service delivery	11 19.64%	45 80.36%	56	4.36%
Assurance Knowledge and skills of employees	15 30.61%	34 69.39%	49	3.82%
Empathy Waiting time	2 12.50%	14 87.50%	16	1.25%
Responsiveness Speed of performing the service	3 50.00%	3 50.00%	6	0.47%
Willingness of employees	3 50.00%	3 50.00%	6	0.47%

7.6.1.4 Importance of various service determinants

The number of critical incidents allocated to each service determinant in the present study already indicates the importance of the various determinants for the e-service quality model. Table 7.16 below summarises the results of the present research per service determinant identified for the e-services.

Table 7.16: Responses per service determinant for the e-services

Determinant	Negative responses	Positive responses	Total	Percentage % (n = 1 284)
Fulfilment	174	228	402	31.31
Convenience	45	227	272	21.18
General	26	180	206	16.04
Efficiency	61	99	160	12.46
System availability	99	0	99	7.71
Reliability	45	11	56	4.36
Assurance	34	15	49	3.82
Empathy	14	2	16	1.26
Responsiveness	6	6	12	0.93
Security	4	8	12	0.93

For the purposes of the present study, the fulfilment service determinant was found to be the most important service determinant, with 31.31% (402 critical incidents) of the total number of critical incidents (n = 1 284) allocated to it. The convenience service determinant attracted the second highest number of critical incidents of 272 critical incidents (21.18%, n = 1 284). The efficiency service determinant was ranked third, with 12.46% of the responses (160 critical incidents, n = 1 284) allocated to it.

The fact that the fulfilment service determinant was regarded as the most important by the respondents in the present research – with the efficiency service determinant in third place (therefore also regarded as very important) – is clearly in line with the findings of Lee and Lin (2005:171), Parasuraman *et al*. (2005), Wolfinbarger and Gilly (2003:196) and Yang *et al*. (2004).

The importance of the convenience service determinant for measuring service quality was not specifically addressed in the literature. It is, however, recommended that convenience

should be included as a service determinant in the e-service quality model, because convenience

- directly affects perceptions of a firm's service quality (Berry *et al*. 2002);
- was also found to be relevant in other studies (Connolly & Bannister 2008; Parasuraman *et al*. 2005; Yang *et al*. 2004);
- is positively associated with website service quality (Zhang & Prybutok 2005); and
- is included in the most widely used e-service quality model (E-S-Qual), as well as in the only other service quality study of e-services in a tax agency environment to date (Connolly & Bannister 2008).

The system availability service determinant attracted less than 10% but more than 5% of the responses, namely 7.71% of the critical incidents (99 critical incidents, n = 1 284).

The four service determinants that form part of the assistance service dimension all attracted less than 5% of the total responses. The reliability service determinant attracted 4.36% of the responses, the assurance service determinant 3.82%, the empathy service determinant 1.26% and the responsiveness service determinant 0.93% of the total number of responses.

Although the security service determinant forms part of the normal operations service dimension, it was awarded the lowest number of critical incidents – only 0.93% (12 critical incidents, n = 1 284). It must be acknowledged that security may have attracted such a low number of responses in the present survey because tax practitioners only face an indirect risk in using e-filing. The direct risk of using e-filing is carried by the taxpayer. Nevertheless, it is proposed that the security service determinant should still represent a service determinant on its own for the purposes of the present research, because

- the security service determinant may have a significant influence on customers' global evaluations of the service quality of e-services (Parasuraman *et al*. 2005);
- the critical incidents were reported mainly through the website, which may have contributed to an underestimation of the importance of the security determinant, as suggested by Wolfinbarger and Gilly (2003); and
- users of the e-services of SARS could be assumed to be frequent e-service users.

7.6.2 Questions to be included to evaluate the e-service quality of SARS

Christobal *et al*. (2007:7) suggest that the same measuring scale can be used for both the general website and the e-filing website, as in the case of SARS. In the present research, the website and e-filing simply represent different service channels in the proposed e-service quality model. The present research generally does not prescribe the specific wording to be included in evaluating the e-service quality of SARS, but the content of the questions to be included in such a model is proposed in Table 7.17 below. The detailed content is presented per service dimension and service determinant, and is presented in the order of perceived importance, based on frequencies. Apart from the detailed aspects recommended for inclusion in the service quality model, an additional global judgement should also be measured separately. It is recommended that this global assessment should be measured not for the e-services overall, but for each of the two e-service channels (e-filing and the website) (Conclusion 6.22).

Table 7.17: Proposed content of measuring instrument of e-service quality of SARS

Conclusion number	Proposed content of measuring instrument
NORMAL OPERATIONS SERVICE DIMENSION **Fulfilment service determinant**	
6.6	A question to determine the need for the expansion of the scope of the services offered through e-filing.
6.7	A question to evaluate the completeness of the content of the website.
6.8	A question that evaluates the speed of the tax assessment process. Separate evaluations should be included for • the VAT and PAYE returns; and • the income tax returns. For income tax returns, separate evaluations should be available for • the peak periods (July to February); and • the off-peak periods (March to June).
6.9	A question that evaluates separately the speed (in working days) of processing and paying refunds to clients relating to • income tax refunds; and • VAT refunds.
6.10	It is recommended that the following question relating to the speed of the services for the dispute resolution process be included: “In the case of a dispute on a tax assessment that does not arise because of a processing error by SARS, it should be determined how long it takes from the date of the assessment up to the date that the letter of rejection or acceptance of the objection is received.”
6.11	A question that evaluates the timeliness of the availability of the income tax returns through the e-filing service channel • for natural persons; • companies; and • trusts.

6.12	A question that evaluates whether the website always provides up-to-date information.
6.13	A question that evaluates the ability of SARS to deliver accurate first-time service solutions in • issuing tax returns; • processing and issuing tax assessments; and • processing tax payments.

Efficiency service determinant

6.14	A question that evaluates the ease of using • the website; and • e-filing.
6.15	A question to evaluate the user-friendliness of the structure and the layout and the organisation of the information on • the website; and • e-filing.
6.16	A question to determine the efficiency of the speed of the website and e-filing in loading pages.
6.17	A question to evaluate the system availability of the website and e-filing.
6.18	A question to evaluate the ease of finding information on • the website; and • e-filing.

System availability service determinant

6.19	A question that evaluates the tax practitioners' perception(s) relating to (un)successful pre-testing of e-filing or any additional processes introduced on e-filing before it was launched.
6.20	A question to determine whether the e-filing facility crashes or freezes while it is being used.

Security service determinant

6.21	A question to determine whether e-filing is perceived to protect the personal information of the taxpayer and the tax practitioner.

PERCEIVED VALUE DIMENSION

Convenience service determinant

6.23	A question relating to convenience in which respondents are requested to use a scale to rate the overall convenience of using • the website; and • e-filing.

Incentive service determinant

6.24	A question relating to incentives in which respondents are requested to rate e-filing on a scale on the overall value of the e-services encouragement incentives offered for using the service.

ASSISTANCE SERVICE DIMENSION

Reliability service determinant

6.25	A question that evaluates SARS's ability to perform a service correctly the first time. This should be tested for the following service channels: • the e-filing e-mail facilities; and • the e-filing call centre. The question should provide for different scales in the measuring instrument. One end of the scale should reflect accurate first-time service delivery and the other end of the scale should reflect total service failure.

Assurance service determinant

6.26	A question that tests whether the tax practitioners perceive the knowledge and skills of the employees who provide services to the tax practitioners • through the e-filing call centre; and • through an e-filing e-mail to provide sufficiently clear, accurate and helpful responses.
6.27	A question that evaluates whether the tax practitioners perceive the content of the user guide and help function as providing sufficiently clear, accurate and helpful assistance.

Empathy service determinant

6.28	A question to determine the perceptions of tax practitioners with regard to waiting time before they are served at the e-filing call centre.

Responsiveness service determinant

6.29	A question that measures the speed (the number of working days) of the turnaround time for receiving assistance when corresponding with SARS through the e-filing e-mail.
6.30	A question addressing the degree of willingness of SARS employees to assist the tax practitioners through the e-filing call centre.

The order of the questions in the questionnaire that will be used to conduct a survey to determine the perceptions of the tax practitioners with regard to the service quality of SARS should not necessarily correspond to the order indicated in Table 7.16. It is also not necessary to provide for a distinction between the various service dimensions and service determinants with the service quality measuring instrument. The distinction between the service quality dimensions and service quality determinants only becomes relevant when the results of the survey are analysed.

7.6.3 Managerial implications of present research with regard to the e-services

For the e-services, the number of positive responses (59.97%, n = 1 284), exceeded the number of negative responses (40.03%, n = 1 284). The results for the e-services were the inverse of the findings in respect of the total responses, where approximately 60% of the critical incidents were negative and approximately 40% of the critical incidents were positive. It is clear that SARS's expansion of its provision of e-services is not only important (as indicated by the number of critical incidents allocated to this service channel), but is experienced mainly in a positive manner by the tax practitioners. The fact that the e-services received such a high percentage of positive responses may indicate that the minimum requirement expected by the responding tax practitioners with regard to the e-services rendered by SARS was exceeded.

7.6.3.1 Importance of service attributes

The frequencies of the different service attributes could assist SARS to direct its service strategies to the relevant service aspects if it would like to enhance the quality of the e-services it provides to tax practitioners. The details of the importance of the identified service attributes for the present research are listed in Table 7.18 below.

Table 7.18: Importance of service attributes for e-services

Service determinant	Service attribute	Positive (n = total for attribute)	Negative (n = total for attribute)	Total	Percentage (%) n = 1 284
General		180 87.38%	26 12.62%	206	16.03%
Fulfilment	Scope of services offered	83 44.15%	105 55.85%	188	14.64%
Fulfilment	Speed of service performance	89 60.14%	59 39.86%	148	11.53%
Convenience	Time saving	110 79.14%	29 20.86%	139	10.83%
Efficiency	Ease of use	79 90.80%	8 9.20%	87	6.78%
Fulfilment	Accurate service delivery	56 84.85%	10 15.15%	66	5.14%
Reliability	Accurate service delivery	11 19.64%	45 80.36%	56	4.36%
System availability	Pre-testing	0 0.00%	52 100.00%	52	4.05%
Assurance	Knowledge and skills of employees	15 30.61%	34 69.39%	49	3.82%
System availability	Crash and freeze problems	0 0.00%	47 100.00%	47	3.66%
Efficiency	Organisation	16 35.56%	29 64.44%	45	3.50%
Convenience	Electronic filing system	32 84.21%	6 15.79%	38	2.96%
Convenience	Reduction of effort	26 89.66%	3 10.34%	29	2.26%
Convenience	When I want it	20 86.96%	3 13.04%	23	1.79%

Convenience	General	21 100.00%	0 0.00%	21	1.63%
Empathy	Waiting time	2 12.50%	14 87.50%	16	1.25%
Efficiency	Speed of launching the site and pages	2 13.33%	13 86.67%	15	1.17%
Efficiency	Ease of finding information	2 15.38%	11 84.62%	13	1.01%
Convenience	Cost saving	9 81.82%	2 18.18%	11	0.86%
Security	Protection of personal information	8 88.89%	1 11.11%	9	0.70%
Convenience	Where I want it	6 100.00%	0 0.00%	6	0.47%
Responsiveness	Speed of performing the service	3 50.00%	3 50.00%	6	0.47%
Responsiveness	Willingness of employees	3 50.00%	3 50.00%	6	0.47%
Incentive	Incentive	3 60%	2 40%	5	0.39%
Security	Protection of tax practitioners from personal liability	3 100.00%	0 0.00%	3	0.23%

In addition to the general responses, it was found that the scope of the service attribute of the e-services offered in the fulfilment service determinant is the most important service attribute when the e-service quality of SARS is evaluated. This service attribute attracted 14.64% of the responses (188 critical incidents, n = 1 284). The scope of the e-service attribute also included those service aspects that related to the completeness of the website. As the number of negative responses (55.85%) slightly exceeds the number of positive responses (44.15%), it appears that the tax practitioners would like to see future expansions to the current e-service offerings. The elimination of current e-service offerings may also affect e-service quality very negatively.

The second most important service attribute appeared to be the speed of the service performance service attribute, which also falls within the fulfilment service determinant, with 148 critical incidents (11.53%, n = 1 284) relating to it. It appears that most tax

practitioners are satisfied with the speed of the services performed through the e-services, as 60.14% of the responses were positive.

The time saving service aspect allocated under the convenience service determinant was found to be the third most important service quality service attribute, with 139 critical incidents (10.83%, n = 1 284) allocated to it. Again, most of the respondents commented positively with regard to the time saving aspects of the e-services, in that 79.14% of the responses were positive.

The accurate service delivery service attribute attracted 122 critical incidents (9.5%, n = 1 284) and could be regarded as the fourth most important service attribute for evaluating the e-service quality of the services provided by SARS. The accurate service delivery service attribute was relevant to two different service quality dimensions, namely the normal operations dimension and the assistance dimension. Of the responses, 66 (5.14%, n = 1 284) related to the fulfilment service determinant in the normal operations service dimension. An overwhelming 84.85% of the accurate service delivery responses in this service dimension were positive. A total of 56 critical incidents (4.36%, n = 1 284) referring to the accurate service delivery aspects related to the reliability service determinant in the assistance service dimension. The latter accurate service delivery responses represented 42% of the total responses for the assistance service dimension. Unlike the responses allocated to the fulfilment service determinant, the accurate service delivery responses in the assistance service dimensions were predominantly negative: 80.36% (45 critical incidents, n = 56) of the critical incidents were negative and only 19.64% (11 critical incidents, n = 56) of the critical incidents were positive.

The ease of use of the e-services in the efficiency service determinant was the only other service attribute that attracted more than 5% of the responses, with 87 critical incidents (6.78%, n = 1 284). An overwhelming 90.80% of the ease of use responses were positive.

Although the knowledge and skills of the employees attracted less than 5% of the responses, with 49 critical incidents (3.82%, n = 1 284) relating to it, this service attribute was also classified as falling in the assistance service dimension and represented 37% of the total responses in this service dimension. Given the fact that not all the respondents would have required the assistance services, this service attribute may also be regarded as very important for evaluating the e-service quality of SARS and more specifically the

assistance dimension of the e-service quality of SARS. The fact that more respondents responded negatively (69.39%) than positively (30.61%) may also indicate that this service attribute should possibly be regarded as one of the service priorities that SARS needs to consider.

7.6.3.2 Results per service channel

Of the total number of critical incidents that related to the e-services, 1 166 (90.81%, n = 1 284) related to e-filing and 118 (9.19%, n = 1 284) related to the website. E-filing could therefore be regarded as far more important to the respondents than the general SARS website. Nevertheless, the 118 responses that related to the general website indicated that, although the general website was less important to these respondents than e-filing, the participants still regarded the general website as important.

7.7 E-SERVICES: VALIDATING THE PROPOSED E-SERVICE QUALITY MODEL

7.7.1 Introduction

Of the existing e-service quality studies, the studies by Buckley (2003), Connolly and Bannister (2008), Yang *et al*. (2004) and Zhu *et al*. (2002) were conducted in service industries. Of these, the studies by Buckley (2003) and Connolly and Bannister (2008) were conducted in the service industry in the public sector. The study by Connolly and Bannister (2008) was specifically performed in a tax agency environment – the Irish tax collection agency. Connolly and Bannister (2008) adjusted the scale developed by Parasuraman *et al*. (2005) slightly for the purposes of their study. Parasuraman *et al*.'s (2005) multi-item scale was designed to assess e-service quality, but there was no research demonstrating the reliability and validity of the E-S-Qual scale in the tax collection agency environment. Connolly and Bannister (2008) based their choice of measuring instrument on the literature review they had conducted.

The E-S-Qual measuring scale for e-service quality has also been successfully used by other researchers, such as Kim *et al*. (2006), Nomdoe and Pather (2007) and Zhao and Peng (2007). Nomdoe and Pather (2007:99) found that the E-S-Qual scale has been extensively cited and has been tested and adopted in various contexts. Mekovec *et al*. (2007:17) agree that the E-S-Qual measure has served as a basis for various adaptations

and extensions that have created several other e-service quality and related measures. Kim *et al*. (2006:55,69) found that E-S-Qual was one of the most comprehensive models on e-service quality and that it provided more representative information than other models. Boshoff (2007) did a psychometric assessment of the E-S-Qual scale and found that E-S-Qual is a valid and reliable instrument. He concluded that it was the most effective scale to measure the quality of e-services.

The E-S-Qual scale can thus be regarded as an e-service quality measuring instrument with a high degree of validity that is applicable globally in both the private and the public sectors. The E-S-Qual scale has, amongst other things, also been used in developing the definitions of the classification scheme employed in the present research. A comparison of the proposed e-service quality model with the E-S-Qual scale may therefore contribute to the reliability of the e-service quality model proposed in the present research.

The E-S-Qual model and the e-service quality model proposed in the present research both incorporate different levels of conceptualisation. They are both divided into service dimensions, service determinants and service attributes. A detailed comparison between the two scales is discussed in this section for each conceptualisation level. Table 7.19 provides a summary of the comparison of the E-S-Qual instrument with the proposed e-service quality model for SARS's service quality measure.

7.7.2 Comparison of the service quality dimensions

Firstly, E-S-Qual is divided into four different dimensions, namely the normal services, recovery services, perceived value and loyalty intentions. In the present research, only three of these dimensions were found to be relevant to the e-service quality model, namely the normal service dimension, the assistance (recovery) service dimension and the perceived value service dimension.

Although the designations of two of the proposed dimensions differ slightly from those of the equivalent E-S-Qual dimensions, the scope in both cases is, in fact, the same. In the model proposed in the present research, the normal dimension in E-S-Qual is referred to as the normal operations dimension. The reason for renaming the dimension was to eliminate any confusion arising from the fact that the assistance dimension also includes service aspects that relate to normal services. In the present research, what was called the

recovery dimension in E-S-Qual is referred to as the assistance dimension. For the purposes of the present research, the word “assistance” was found to be more descriptive, as this dimension not only includes service recovery aspects, but also any assistance required to ensure successful use of the e-services. The recovery dimension in E-S-Qual also includes a contact service determinant to evaluate the assistance aspects available when a normal e-transaction is executed – the scope of the definition in both E-S-Qual and the proposed model are the same.

In principle, both E-S-Qual and the model proposed in the present research agree with regard to the definitions for three of the four of the original E-S-Qual dimensions. However, the loyalty dimension identified in E-S-Qual was not found to be relevant to the proposed model. In the only other published study that investigates the e-service quality of a tax agency, that by Connolly and Bannister (2008:313), the researchers included the loyalty intention dimension in their survey instrument. However, the critical incidents gathered in the present research did not specifically address any of the items mentioned under the loyalty dimension.

Customer loyalty *per se* is usually not relevant in the tax agency environment, as there is usually only one tax agency in each country and the tax practitioner can therefore not choose between different service providers. Nevertheless, in the context of e-services, the questions in E-S-Qual that are classified under the loyalty intention dimension relate to the loyalty toward the particular website and not necessarily the loyalty to the service provider *per se*. It could, moreover, be argued that a specific consumer prefers to use a particular type of service online and the choice for that consumer is therefore the different websites he or she chooses, rather than a choice between online and traditional services. In the context of the present research, the choice for the tax practitioner is between e-services and traditional services for the same service provider, namely SARS. The loyalty to the website is evaluated in E-S-Qual, but the fact that SARS is the only service provider could affect the applicability of this service dimension for the present research.

Parasuraman *et al.* (2005:214) also found that customer assessments of e-service quality are strongly linked to perceived value and behavioural (loyalty) intentions. Measuring the perceived value and loyalty does not, therefore, in itself contribute to the measurement of the service quality of an entity, but the results of these measurements could be used to validate the reliability of the results of the e-service quality measurement.

To conclude, at a dimensional level, three of the four dimensions that were identified as relevant to E-S-Qual were also, in principle, relevant to the present research. The loyalty dimension relevant to the E-S-Qual model was found not to be relevant to the present model. The exclusion of loyalty from the e-service quality model should not affect the reliability of the service quality measurement, but would at most reduce the evidence supporting the reliability of the model, because

- loyalty was not specifically addressed by the responding tax practitioners;
- its relevance was reduced by the availability of only one service provider; and
- its measurement did not contribute to service quality, but was only linked to it.

The fact that only three of the four dimensions were found to be relevant in the tax agency environment supports the results of Boshoff (2007:110), who found that the E-S-Qual's four-dimensional configuration is not necessarily valid for all service settings. Parasuraman *et al.* (2005:229) were also of the opinion that the loyalty intention items in their E-S-Qual scale could be deleted or modified for service settings without necessarily jeopardizing the integrity of the e-service quality scale.

7.7.3 Comparison of the service determinants

E-S-Qual consists of seven service determinants – four different service determinants in the normal service dimension and three different service determinants in the recovery service dimension.

In the normal service dimension, the four service determinants of efficiency, system availability, fulfilment and privacy have already been identified. Apart from the privacy service determinant, the other three service determinants in the normal dimension of E-S-Qual are, in principle, similar to those identified in the present research.

In the present research, what E-S-Qual refers to as the privacy service determinant is referred to as the security service determinant. The more descriptive name of "security determinant" was chosen for the model proposed in the present research to distinguish the determinant from privacy aspects that were found to be relevant. The risk of fraudulent use of bank information represented a financial risk and it was also identified as a service attribute in this service determinant. Another service aspect unique to the tax agency environment and included under the security service determinant was the service attribute

of the protection of the tax practitioner against personal liability. It is therefore possible to conclude that the security service determinant as defined in the present research is wider in scope than the privacy determinant in E-S-Qual.

The security service determinant in the present research is a wider concept, but, in principle, the present research bears out the relevance of the remaining three service determinants in the normal dimension of E-S-Qual.

The service recovery dimension in E-S-Qual is divided into three different service determinants, namely the responsiveness, compensation and contact service determinants. The corresponding assistance service dimension in the present research was divided into four different service determinants, namely the responsiveness, reliability, assurance and empathy determinants. The definitions of the identified service determinants in the present research agree in the main with the definitions of the equivalent service determinants identified for the traditional services (see Chapter 5).

The compensation service determinant in E-S-Qual relates to the compensation received by the service provider for any inconvenience experienced. As the E-S-Qual scale focused on websites that sold physical products, the compensation service determinant in that model relates to compensation for the inconvenience of having to return damaged goods. SARS on the other hand, firstly, only renders services and, secondly, does not compensate tax practitioners (taxpayers) for incorrect service deliveries. The e-filing facility provides for a “correction or errors” function after a tax return has been assessed, but this facility is to be used when the tax practitioner makes a mistake when the original return is submitted. The “correction of errors” function can be regarded as very similar to a function used when a customer buys the wrong physical goods and then returns them to obtain the correct physical goods. As the inconvenience in this situation is caused by the consumer, no compensation would be relevant. The compensation service determinant was therefore not found to be relevant to the present research.

The contact service determinant in E-S-Qual relates to the availability of different service channels when assistance is required. The service attributes in this service determinant only focus on the availability of such facilities and no evaluation of the effectiveness of these facilities is included. Parasuraman *et al.* (2005:229) are of the opinion that the contact dimension of E-S-Qual is germane to pure service sites as well. In the present

research, the view is held that the availability of different service channels when assistance is required could be relevant when more than one website's e-service quality is measured. When only one service provider's e-service quality is measured (in the present research, the e-service quality of SARS), the different service channels available when assistance is required would be known to SARS. The contact service determinant is therefore not relevant to the present research.

In the E-S-Qual model, the responsiveness service determinant is defined widely and, as a result, it encompasses all the service aspects of all the identified service determinants in the assistance dimension of the present research. This may indicate that the four identified service determinants in the assistance dimension as identified for the present research (the responsiveness, reliability, assurance and empathy determinants) are not service determinants as such in the e-service environment, but that collectively they may represent the responsiveness service determinant. The fact that three of these four service determinants, as identified in the present research, each consist of only a single service attribute contributes to the conclusion that they collectively constitute a higher order construct. As none of the other service determinants in the recovery dimension of E-S-Qual were found to be relevant to the present research, the model proposed in the present research required adjustment, in that all the service aspects in the assistance dimension should be combined into only one service determinant, namely responsiveness. To ensure that the diagnostic value of the e-service quality model is not impaired, the responsiveness service determinant in the assistance dimension of the e-service quality model should have sub-service determinants of reliability, assurance, empathy and responsiveness. Because the responsiveness service determinant is then the only service determinant left in the assistance dimension, with its identified sub-determinants, the content of the model does not require any adjustment. The assistance dimension in fact represents the responsiveness service determinant.

In the normal service dimension, all the identified service determinants (efficiency, system availability, fulfilment and security) were also relevant to the present research. Only the responsiveness service determinant in the assistance dimension was found to be relevant to the present research. In E-S-Qual, the perceived value service dimension that was found to be relevant to both the E-S-Qual model and the e-service quality model proposed in the present research is divided only into different service attributes or service aspects. In

E-S-Qual no service determinants were identified for this service dimension. In the present research, the service determinants of convenience and incentive were found to be relevant to the perceived value service dimension.

The following service determinants or dimensions were found to be relevant to the present research. The service attributes within these service determinants therefore required further analysis:

- the service determinant of efficiency;
- the service determinant of system availability;
- the service determinant of fulfilment;
- the service determinant of privacy;
- the service determinant of responsiveness, with the sub-determinants of reliability, assurance, empathy and responsiveness; and
- the perceived value dimension, which is divided into different service aspects.

The service attributes identified for each service determinant are compared below using the following headings:

- E-S-Qual items not included in the proposed model (see Section 7.7.4 below);
- E-S-Qual items combined in the proposed model (see Section 7.7.5 below);
- modifications of E-S-Qual items (see Section 7.7.6 below);
- items in both scales that agree in principle (see Section 7.7.7 below); and
- additional service aspects not mentioned in E-S-Qual (see Section 7.7.8 below).

7.7.4 E-S-Qual items not included in the proposed model

Because one service dimension (the loyalty service dimension) and two service determinants (the compensation and contact service determinants) identified in E-S-Qual were found not to be relevant in the present research, the service attributes in this service dimension and service determinants were also not included in the e-service quality model of the present research.

Some of the items in the service determinants that were relevant to both e-service quality models were excluded from the e-service quality model proposed in the present research. To evaluate the effect of such exclusions, Parasuraman *et al.* (2005:229) suggested three different categories of importance of the E-S-Qual service attributes in the identified service determinants in the E-S-Qual model in the context of pure service settings:

- service determinants for which all the service attributes should be applicable (see Section 7.7.4.1);
- service determinants for which several of the service attributes should be applicable (see Section 7.7.4.2); and
- service determinants that could be deleted or modified (see Section 7.7.4.3).

7.7.4.1 Service determinants for which all the service attributes should be applicable

Parasuraman *et al.* (2005:229) argue that all items under the efficiency, system availability and security determinants of E-S-Qual are germane to pure service website quality evaluations. As the exclusion of the items referred to could potentially affect the integrity of a scale, appropriate reasons for any exclusion are required. Such reasons are therefore provided below.

As suggested by Parasuraman *et al.* (2005:229), all the service attributes in the efficiency and system availability service determinants were found to be relevant to the e-service quality model proposed in the present research.

Two of the three service attributes identified in E-S-Qual as relevant to the security determinant were found not to be relevant to the e-service quality model proposed in the present research. The first is a service attribute that evaluates whether the service provider "protects information about my Web-shopping behavior" (PRI1 in Parasuraman *et al.* 2005:231). In the tax agency context, this statement would probably relate to the protection of information about amounts owed or returns not submitted, thus the protection of information regarding the taxpayer, notably his or her compliance with tax obligations. For the purposes of the present research, this statement would relate to the fulfilment of the tax practitioners' obligations (how many of a given tax practitioner's clients' tax returns are always submitted on time and so on.). Although the privacy of the **taxpayer** may be very relevant to an e-service service quality evaluation model, the e-service quality model

used in the present research evaluated the services of SARS as perceived by the **tax practitioners**. No responses related specifically to this particular aspect. The fact that the present research focuses on the evaluation of the e-service quality as perceived by a different user-group (the tax practitioner, as agent, and not the customer) and the absence of any responses in this regard clearly indicate the low relevance of this service aspect to the present research.

The second service attribute in the security service determinant that was found not to be relevant to the present research evaluated whether the service provider "does not share my personal information with other sites" (PRI2 in Parasuraman *et al.* 2005:231). The relationship between a taxpayer (including a tax practitioner) and a tax agency is inherently a much more confidential relationship than the relationship between a customer and a retail store. None of the responding tax practitioners addressed this aspect of concern. The fact that the tax practitioners' register has been in existence for just over two years, and the fact that the database has not, to date, been shared, may have contributed to the fact that no responses in this regard were received. As SARS is not necessarily concerned with commercial gains, the risk that SARS would share its tax practitioners' database for commercial benefit is minimal. It could thus be concluded that the risk that the tax practitioners' database will be shared is lower in a tax agency environment than in a commercial enterprise.

Only two of the 15 service attributes in the efficiency, system availability and security service determinants – which, according to Parasuraman *et al.* (2005) should also be relevant in service settings – were found not to be relevant to the e-service quality model proposed to evaluate SARS's services.

7.7.4.2 Service determinants for which several of the service attributes should be applicable

Parasuraman *et al.* (2005:229) are of the view that several of the items under the three determinants of responsiveness, fulfilment and compensation should also be applicable to pure service sites. The results of the comparison for each of these service determinants are discussed separately below.

(a) Responsiveness service determinant

Three of the five service attributes in the responsiveness service determinant of E-S-Qual were also relevant to the present research. Two of the five service attributes in the responsiveness service attribute of E-S-Qual were found not to be relevant to the e-service quality model proposed in the present research. The first is a service attribute that determines whether the website "provides me with convenient options for returning items" (RES1 in Parasuraman *et al*. 2005:231). This item in the tax agency environment could be interpreted as the convenience of the various options available to solve any e-service problem. Although in the present research convenience was found to be very important to the perceived value dimension of the e-service quality model, the responding tax practitioners did not specifically refer to convenience with regard to the problem-solving aspects relating to the assistance dimension. For the traditional service quality model, the convenience of adding the e-mail facility to enhance problem-solving was found to be relevant (see Section 5.10.2.1 – Availability of different service channels). Apart from the user-guide assistance facility on e-filing, both the call centre and e-mail service channels are also available to the traditional services. Hence, the tax practitioners may also have expected these service channels to be available for the e-services and this may therefore have contributed to the fact that none of the responding tax practitioners commented on the convenience of the assistance options.

The second service attribute that was found not to be relevant in the present research determines whether the website "offers a meaningful guarantee" (RES3 in Parasuraman *et al*. 2005:231). SARS is rendering services to assist taxpayers (tax practitioners) to comply with their tax obligations. SARS neither renders a specific service for a consideration nor sells a product. The guarantees that are usually associated with the sale of physical goods or the rendering of specified services are therefore not relevant to the present research.

(b) Fulfilment service determinant

Only three of the seven service attributes identified in the E-S-Qual model's fulfilment service determinant were found to be relevant to the present research. The four statements in E-S-Qual (Parasuraman *et al.* 2005:231) that were found not to be relevant in the present research, namely the ability of the service provider to "…deliver orders when promised" (FUL1), "have in stock the items the company claims to have" (FUL5), to be

"truthful about its offerings" (FUL6) and to "make accurate promises about delivery of products" (FUL7), relate to the ability of the customer to rely on the promises of the service provider and to trust the service provider to perform the services as promised.

Nothing in the SARS Service Charter relates specifically to e-services and no items should therefore be included in the e-service quality model to evaluate the reliability of promises made by SARS relating to e-services. A reference to the ability of SARS to keep its promises was included in the evaluation of the traditional services. Responding tax practitioners did not specifically refer to SARS's adherence to promises in respect of e-services. It is submitted that perhaps, if the critical incidents were only to be collected for e-services, the respondents would possibly include critical incidents relating to the adherence to promises. In the traditional service quality model, two separate service attributes relate to SARS's adherence to its promises, namely

- the adherence to specific promises service attribute (Section 5.11.4), which attracted only 45 critical incidents (1.08%, n = 4 183); and
- the adherence to promises in general service attribute (Section 5.11.5), which attracted only 24 critical incidents (0.58%, n = 4 183).

The low frequencies of all the responses that related to the adherence of SARS to promises, as presented in the traditional service quality model, may support the decision to exclude the evaluation of this service aspect for a specific service channel (in this case, the e-services).

(c) Conclusion

Parasuraman *et al.* (2005:229) did not specify the items in the fulfilment, responsiveness and compensation service determinants that should be relevant and only referred to the fact they regarded **several** to be applicable. The compensation service determinant as a whole was found not to be relevant to the present research. Several of the service attributes in the responsiveness service determinant (three out of five) and the fulfilment service determinant (three out of seven) were found to be relevant to the present research. The reason for excluding the compensation service determinant is not necessarily the difference between the evaluation of products versus the evaluation of e-service quality, but rather that it reflects a difference between the e-service quality evaluations for specific

types of services in the public sector. It may indicate a difference in the service quality evaluations where a service provider is only there to assist with compliance with a legal obligation (for example, by issuing identity books or drivers' licenses and by providing assistance to comply with the legally prescribed tax obligation, as in the case of SARS) or where the public sector provides, for example, legal assistance to individuals who cannot afford their own legal representation. Service delivery quality that relates to compliance with a legal obligation only involves time and effort sacrifices or risks on the side of the client (taxpayer). Where other services are provided, the client sacrifices more than just time and effort. Compensation would therefore be more relevant in the case of service quality deficiencies.

7.7.4.3 Service determinants that could be deleted or modified

Parasuraman *et al.* (2005:229) found that all the items that were part of the perceived value and perceived loyalty dimension can be deleted or modified for service settings without necessarily jeopardising the integrity of the e-service quality scale. The loyalty dimension as a whole was found to be not relevant to the present scale (see Section 7.7.2 above). Several of the items classified under the perceived value dimension in E-S-Qual were found not to be relevant to the present research.

Under the perceived value dimension, E-S-Qual includes Item 1, which evaluates the "prices of the products and services available at this site (how economical the site is)". SARS does not sell a product and does not render a service at a price. This service aspect was therefore not relevant to the present research.

Under the perceived value dimension, E-S-Qual includes a second statement (Item 3) that evaluates the "extent to which the site gives you a feeling of being in control". As the relationship between SARS and the tax practitioner is compulsory and most of the required actions are legally prescribed, the tax practitioner cannot experience the same level of control in the relationship. The control in the service relationship was also never mentioned by any of the responding tax practitioners. For the present research, this aspect was not found to be relevant.

Under the perceived value dimension, E-S-Qual includes a third statement (Item 4) that evaluates the "overall value you get from this site for your money and effort". From the

wording of this statement, it is clear that the focus is on the overall evaluation of the value the customer receives in return for money and effort. In the tax agency environment, whether a taxpayer has a taxable income of R200 000 or a taxable income of R200 million, he or she is obliged to submit a tax return and make tax payments. Provided that no provisional tax (which is currently not yet available on e-filing at SARS) is payable by the taxpayer and if it is assumed that each taxpayer using the services of the tax practitioner earns a salary from only one employer, the effort by the tax practitioner would be the same for each taxpayer (irrespective of the taxable income) with regard to the rendering of the tax return as well as the payment of the taxes due. There could not be any direct link between the value and the money expended in a tax agency environment of making use of e-services. As the present research evaluated the services from the perspective of tax practitioners (and not taxpayers) any link between money expended and value was negligible. The only value for the responding tax practitioners could lie in the convenience of using the site, an aspect that is already separately measured. As none of the other perceived value items were found to be relevant to the present research, the separate overall value measurement would only result in a duplication of the convenience measurement.

7.7.5 E-S-Qual items combined in the proposed model

A number of other items in the e-service quality model proposed in the present research did not fully exclude E-S-Qual items, but instead combined two E-S-Qual service attributes into single or multiple service attributes.

7.7.5.1 Combined items in the efficiency service determinant

In the efficiency service determinant, E-S-Qual includes two statements that relate to the organisation of e-services. The first statement relates to whether the information on the website is or is not well organised (EFF4 in Parasuraman *et al*. 2005:230). The second statement refers to the fact that the site is or is not well organised (EFF8 in Parasuraman *et al.* 2005:230). In the present study, the responding tax practitioners did not distinguish between the organisation of the website and the organisation of the information on the website. In the proposed e-service quality model, both these two items are therefore combined into a singe service attribute.

In the efficiency service determinant, E-S-Qual uses three different statements that could relate to the perceptions of tax practitioners with regard to the speed of the site. The first indicates that the site "enables me to complete a transaction quickly" (EFF3 in Parasuraman *et al*. 2005:230), the second that the site "loads its pages fast" (EFF5 in Parasuraman *et al*. 2005:230) and the third that "the site enables me to get onto it quickly" (EFF7 in Parasuraman *et al*. 2005:230). The responding tax practitioners did not distinguish between the speed of launching the site and the speed of the loading of pages on a site. They also made no distinction between the speed of the website itself and the speed of completing a transaction. All three these aspects have been combined into a single item in the e-service quality model of the present research.

The efficiency service determinant of E-S-Qual also included two statements that relate to the ease of finding information service attribute measured in the present research. The first refers to the ease of finding what is required on a site (EFF1 in Parasuraman *et al*. 2005:230) and the second refers to the ease of getting anywhere on a site (EFF2 in Parasuraman *et al*. 2005:230). It appears that the second statement refers to the ease of getting to where a person wants to be on a site when the person knows where the information is. From the responses in the present research, it was never clear whether the ease or difficulty of finding information related to the structure or complexity of the navigation functions of the site. The ease of finding information service attribute for the purposes of the present research refers to the ease of finding information whether or not the tax practitioner knows where to find the information. The two statements of E-S-Qual (EFF1 and EFF2) were therefore combined into a singe evaluation item in the proposed model.

7.7.5.2 Combined items in the system availability service determinant

The system availability service determinant in the E-S-Qual model includes two questions relating to the availability of the website. The first is "the site launches and runs right away" (SYS2 in Parasuraman *et al*. 2005:231) and the second is "the site is always available for business (SYS1 in Parasuraman *et al*. 2005:231). For the purposes of the present research, both these aspects were combined into the availability of the site service aspects. The reason for the combination of the mentioned E-S-Qual service attributes into this one service attribute was that currently no system availability notification system is operational in SARS, so tax practitioners would not be able to distinguish between a

situation in which the site fails to launch and run immediately (at the first attempt) because of a system error, as opposed to one where it fails to do so because the website is not available.

The system availability service determinant also includes a statement that evaluates whether the "site does not crash" (SYS3 in Parasuraman *et al*. 2005:231) and another statement that evaluates whether "[p]ages at this site do not freeze after I enter my order information". In the present research, responding tax practitioners did not distinguish between these two service aspects, as they perceived the consequences of both scenarios to be similar: they are aborted from the site (if the pages crash, this is automatic, but if the pages freeze, the frustration of the tax practitioner usually results in voluntary abortion of the process). The items relating to the crash and the freeze of the website were therefore combined into a singe evaluation item in the model proposed in the present research.

7.7.5.3 Combined items in the fulfilment service determinant

The fulfilment service determinant includes two statements that evaluate the speed of the service, namely "This site makes items available for delivery within a suitable time frame" (FUL2 in Parasuraman *et al*. 2005:231) and "It quickly delivers what I order" (FUL3 in Parasuraman *et al*. 2005:231). Although both statements refer to the speed of the performance of the service, the first evaluates the speed from the perspective of the consumers' expectations regarding a suitable delivery timeframe. The second evaluates the speed of the delivery itself. As the use of e-filing in the present research only began a short while before the collection of the critical incidents, the expectations of the tax practitioners with regard to the speed of the services could only be benchmarked against the speed of the services as performed through the traditional services. The separate measurement of their expectations in this regard is therefore not advisable at this stage. The model proposed in the present research therefore evaluates only the turnaround time (speed) of the services per relevant business process and separately per service channel. The measurement of the performance-only items is in line with the findings of Cronin and Taylor (1992), who argue that perceived performance may already lead a respondent through a mental process of comparing the perceptions to the expectations. The single measurement of the speed of the service delivery therefore implies a combination of the two statements (FUL2 and FUL3) in E-S-Qual.

7.7.6 Modifications of E-S-QUAL items

The authors who developed and adapted the SERVQUAL model, Parasuraman *et al*. (1991a) maintain that minor modifications to the wording of items to adapt them to a specific setting are appropriate and should not affect the integrity of the scale. It was assumed that this conclusion would also be true for the generic E-S-Qual e-service quality model developed by the same authors.

The order in which the items in E-S-Qual and the proposed service quality model are presented differs. In the model proposed in the present research, the items are listed per e-service quality dimension, arranged in descending order from the dimension that received the most responses to the one that received the fewest. The relevant service determinants and service attributes were similarly presented in descending order, depending on the frequency of the responses. No specific order is used in E-S-QUAL. Differences in the order in which items are presented in the separate models should not unduly influence the validity or reliability of the instruments.

The wording of some items in the proposed model has been adapted or there are other minor modifications adjusting the items specifically to the SARS context. Assuming that items would require modification for suitability in the tax agency environment, normal wording changes have not been included in this discussion. Only the changes that alter the focus of a specific service item so that it is not identical in both models are analysed below.

Under the E-RecS-QUAL dimension in the responsiveness service determinant, E-S-Qual includes an item that determines whether the website “handles product returns well” (RES2 in Parasuraman *et al*. 2005:231). This statement focuses on the way in which the product return is handled. In the tax agency environment, no physical product is sold, but this item could relate closely to the success of the assistance services when problems are encountered with the services. In the model proposed in the present research, the service quality attributes that measure the service quality of a successful assistance service were expanded to represent not only one item in the service quality model, but the following

three different service attributes:

- accurate service delivery (Section 6.18 – Conclusion 6.25);
- knowledge and skills of employees (Section 6.19.1 – Conclusion 6.26); and
- willingness of employees (Section 6.21.2 – Conclusion 6.30).

The evaluation of all three the above items in combination will possibly evaluate at least what is envisaged by RES2 in E-S-Qual.

The speed of the services is addressed in RES5 in Parasuraman *et al*. (2005:231). This item evaluates whether the "site takes care of problems promptly". In the model proposed in the present research, this service attribute was divided into two different service attributes that separate the turnaround time from the time that the tax practitioner's productive capacity is consumed. The evaluation of both the items mentioned in the present research will, in combination, possibly evaluate the same aspect as RES5 in E-S-Qual.

7.7.7 Items in both scales that agree in principle

Only six of the E-S-Qual items (EFF6, FUL4, PR13, RES2, RES4 and Item 2 of the perceived value dimension) compare very closely with items in the proposed e-service quality model, without significant modifications.

7.7.8 Additional service aspects not mentioned in E-S-QUAL

The e-service quality model proposed in the present research includes additional items that are not part of E-S-Qual. The original authors of SERVQUAL (Parasuraman *et al*. 1991a) argue that the integrity of the SERVQUAL scale could be influenced when items are deleted from the scale. These authors did not express the same concern about the addition of items. The conclusions these authors made in relation to the SERVQUAL scale may also be relevant to the E-S-Qual scale. The addition of the items identified below should therefore not necessarily influence the integrity of the proposed scale.

7.7.8.1 Additional aspects in the system availability service determinant

The pre-testing service attribute (see Section 6.11.1) under the system availability service determinant led to a conclusion that reads as follows:

Conclusion 6.19:

The e-service quality model should include a question that evaluates the tax practitioners' perception(s) relating (un)successful pre-testing of e-filing or any additional processes introduced on e-filing before it was launched.

The message that emerged from the tax practitioners' responses was that they believed that SARS went live without adequate pre-testing and that SARS is simply trying to solve problems as the process evolves. In the private sector, pre-testing would usually be of great importance, as clients could be lost if a system is not working properly. In the tax agency environment, clients (the taxpayers) do not use the service voluntarily and could also not choose to change to another service provider.

Pre-testing is not specifically mentioned in the E-S-Qual model. Nor has it been mentioned in any other e-service quality model to date. However, while Santos (2003) does not specifically refer to pre-testing, she proposed that an e-service quality model should divide e-service quality into two dimensions, namely an incubative and active dimension (before and after a website is launched) as a criterion for separating the dimensions. She defines the incubative dimension as "the proper design of a Web site, how technology is used to provide consumers with easy access, understanding and attractions of a Web site" (Santos 2003:238). Santos (2003) therefore acknowledged that aspects that are addressed before the website is launched could also be relevant in evaluating e-service quality. Pre-testing would definitely contribute to the quality of the incubative dimension. It is therefore theoretically sound to include it in an e-service quality model.

7.7.8.2 Additional aspects in the fulfilment service determinant

The scope of e-services offered service attribute (see Section 6.9.1) under the fulfilment

service determinant includes Conclusions 6.6 and 6.7, which read as follows:

Conclusion 6.6:

The e-service quality model should include a question to determine the need for the expansion of the scope of the services SARS offers through e-filing.

and

Conclusion 6.7:

The e-service quality model should include a question to evaluate the completeness of the content of the website.

Both the above conclusions relate to the scope of the e-services offered. Conclusion 6.6 relates to the scope of the services offered on e-filing and Conclusion 6.7 relates to the completeness of the website. Parasuraman *et al.* (2005) specifically developed E-S-Qual for websites that sold physical products. If a customer is therefore interested in buying physical products, he or she uses a website that provides for this option and thereafter evaluates the website. In the present research, the e-service quality model is, firstly, developed for services and not for goods. Secondly, it is aimed at the evaluation of a total service offering of a service provider (SARS) and not only the evaluation of a specific known service that is already operational. Thirdly, the evaluation of the total service offering of SARS includes the separate evaluation of various service channels, of which the e-service channel is only one. The fact that the service offerings for the different service channels differ makes the evaluation of the scope of the services offered per service channel very relevant.

7.7.8.3 General additional aspects

Conclusion 6.22 (see Section 6.13) includes the following that ensures the global

evaluation of the e-service quality:

Conclusion 6.22:

Apart from the detailed aspects recommended for inclusion in the e-service quality model, an additional global judgement should also be incorporated to evaluate the service quality of

- *e-filing; and*
- *the website.*

The fact that responding tax practitioners commented proportionally more positively when they commented on the service quality in general may indicate that a better service quality evaluation could be obtained if it also includes a global evaluation. This is in line with the conclusions of Dabholkar *et al*. (2000:141), who argue that consumers evaluate different components (factors) related to the service, but also form a separate overall evaluation of the service quality (which is not the sum or average of the components). For the global evaluation, it is possible that the respondents included specific service aspects that were not critical, but were also relevant to them in their service encounter with the service provider.

7.7.8.4 Additional aspects in the perceived value service dimension

The incentive service aspects (see Section 6.16) under the perceived value dimension include Conclusion 6.24, which reads as follows:

Conclusion 6.24:

The e-service quality model should include a question relating to incentives in which respondents are requested to rate e-filing on a scale on the overall value of the e-services encouragement incentives offered for using the service.

The incentive service aspect is not addressed by Parasuraman *et al*. (2005) in E-S-Qual, but was mentioned by the responding tax practitioners in the present research and also by Santos (2003).

Connolly and Bannister (2008) and Lind *et al*. (2007) found that e-filing offers many benefits to the state, ranging from faster collection (increased efficiency) to human error

reduction and cost savings. SARS would therefore like to encourage as many tax practitioners as possible to make use of e-filing. Because SARS prefers the e-service service channel to the traditional service channel for certain services, the incentives offered to encourage the use of the e-services are highly relevant to the present research. By contrast, most retail stores would prefer customers to use the traditional service channel (visit the store themselves), as this may increase the possibility that the customers might purchase items that they did not initially plan to purchase.

7.7.9 Conclusion: reliability and validity of the proposed model for the e-services

E-S-Qual includes four service dimensions, of which only three were found to be relevant to the present research. The possibility that only three of the four E-S-Qual service dimensions may be relevant in the tax agency environment supports the findings of Boshoff (2007:110), who concluded that the E-S-Qual's four-dimensional configuration is not necessarily valid for all service settings. Parasuraman *et al.* (2005:229) were also of the opinion that the loyalty intention items in their E-S-Qual scale could be deleted or modified for service settings without necessarily jeopardizing the integrity of the e-service quality scale.

In the normal service dimension of E-S-Qual, all the identified service determinants (efficiency, system availability, fulfilment and security) were also relevant to the present research. Only the responsiveness service determinant in the assistance (service recovery) dimension of E-S-Qual was found to be relevant to the present research. In the present research, the service determinants of convenience and incentives were found to be relevant to the perceived value service dimension.

The contact service determinant was found not to be relevant, although Parasuraman *et al*. (2005:229) suggested that it should be relevant to service settings. It is proposed that it may only be relevant in service settings when more than one service provider is available for a specific service.

The compensation service determinant in the E-S-Qual scale relates to compensation for the inconvenience of having to return damaged goods. SARS, firstly, only renders services, and, secondly, does not compensate tax practitioners (taxpayers) for incorrect

service delivery. The compensation service determinant was therefore not found to be relevant to the present research.

Parasuraman *et al*. (2005:229) acknowledge that all phases of their research focused on websites that sold physical products (in contrast to pure service sites, such as those offering financial or information services). They suggest that their scale may not be fully applicable to service settings. However, they suggest that all items under the efficiency, system availability, privacy and the contact determinants of E-S-Qual are germane to pure service sites as well. Only two of the 15 service attributes in the efficiency, system availability and security service determinants – which, according to Parasuraman *et al*. (2005) should also be relevant in service settings – were found not to be relevant to the proposed e-service quality model to be used to evaluate the services of SARS. Of the service attributes in the service determinants that were found to be relevant to the present research, 86.67% (13 out of 15) were also included in the proposed e-service quality model. As the compensation service determinant was not identified as relevant to the present research, all three the service attributes in this service determinant were excluded from the proposed e-service quality model.

Parasuraman *et al*. (2005:229) did not specify the items in the fulfilment, responsiveness and compensation service determinants that should be relevant. They only referred to the fact that they regard several items as applicable. The compensation service determinant as a whole was not found to be relevant to the present research. Several of the service attributes in the responsiveness (three out of five) and the fulfilment service determinants (three out of seven) were found to be relevant to the present research.

Parasuraman *et al*. (2005:229) indicated that all the items that were part of the perceived value and perceived loyalty dimension could be deleted or modified for service settings without necessarily jeopardizing the integrity of the e-service quality scale. The loyalty dimension as a whole was not found to be relevant to the present model. Three of the four items classified under the perceived value dimension in E-S-Qual were not found to be relevant to the present research.

A number of other items in the e-service quality model proposed in the present research did not fully exclude E-S-Qual items, but instead combined two E-S-Qual service attributes into single or multiple service attributes. Other items in E-S-Qual have been modified to

customize them for the SARS service setting. These modifications resulted in the splitting of specific items in E-S-Qual into more than one service attribute.

Apart from specific aspects that were excluded from E-S-Qual (the reasons for these decisions have already been provided in this section), it can be concluded that the proposed e-service quality model agrees in principle (although not necessarily in all material respects) with the generic E-S-Qual model. The congruence between E-S-Qual and the proposed e-service quality model should support the content validity of the proposed service quality model.

Table 7.19: Comparison of E-S-Qual with e-service quality model proposed in present research

E-S-QUAL MEASURING INSTRUMENT	PRESENT RESEARCH	COMPARISON	RESULTS OF COMPARISON
Normal dimension	**Normal operations dimension** (Section 6.8)	Different designations are used for dimensions with the same scope.	Agrees in principle
Efficiency service determinant	*Efficiency service determinant* (Section 6.10)	Efficiency service determinant in both models.	Agrees in principle
EFF1 This site makes it easy to find what I need.	Ease of finding information (Section 6.10.4 – Conclusion 6.18)	The present research combines E-S-Qual's Items EFF1 and EFF2.	Combination
EFF2 It makes it easy to get anywhere on the site.	Ease of finding information (Section 6.10.4 – Conclusion 6.18)	The present research combines E-S-Qual's Items EFF1 and EFF2.	Combination
EFF3 It enables me to complete a transaction quickly.	Speed of launching the site and pages (Section 6.10.3 – Conclusion 6.16)	The present research combines E-S-Qual's Items EFF3, EFF5 and EFF7.	Combination
EFF4 Information at this site is well organized.	Organisation (Section 6.10.2 – Conclusion 6.15)	The present research combines E-S-Qual's Items EFF4 and EFF8.	Combination
EFF5 It loads its pages fast.	Speed of launching the site and pages (Section 6.10.3 – Conclusion 6.16)	The present research combines E-S-Qual's Items EFF3, EFF5 and EFF7.	Combination
EFF6 This site is simple to use.	Ease of use (Section 6.10.1 - Conclusion 6.14)	The present research agrees with E-S-Qual's Item EFF6.	Agrees in principle
EFF7 This site enables me to get on to it quickly.	Speed of launching the site and pages (Section 6.10.3 – Conclusion 6.16)	The present research combines E-S-Qual's Items EFF3, EFF5 and EFF7.	Combination
EFF8 This site is well organized.	Organisation (Section 6.10.2 – Conclusion 6.15)	The present research combines E-S-Qual's Items EFF4 and EFF8.	Combination
System Availability service determinant	*System Availability service determinant* (Section 6.11)	System Availability service determinant in both models.	Agrees in principle
SYS1 This site is always available for business.	Speed of launching the site and pages (Section 6.10.3 – Conclusion 6.17)	The present research combines E-S-Qual's Items SYS1 and SYS2.	Combination
SYS2 This site launches and runs right away.	Speed of launching the site and pages (Section 6.10.3 – Conclusion 6.17)	The present research combines E-S-Qual's Items SYS1 and SYS2.	Combination
SYS3 This site does not crash.	Crash and freeze problems(Section 6.11.2 – Conclusion 6.20)	The present research combines E-S-Qual's Items SYS3 and SYS4.	Combination

SYS4 Pages at this site do not freeze after I enter my order information.	Crash and freeze problems(Section 6.11.2 – Conclusion 6.20)	The present research combines E-S-Qual's Items SYS3 and SYS4.	Combination
	Pre-testing (Section 6.11.1 – Conclusion 6.19)	Not part of E-S-Qual.	Additional
Fulfilment service determinant	*Fulfilment service determinant* (Section 6.9)	*Fulfilment service determinant* in both models	Agrees in principle
FUL1 It delivers orders when promised.	*Not applicable*	The fulfilment of promises was not specifically addressed in the model proposed in the present research.	Deletion of service attribute
FUL2 This site makes items available for delivery within a suitable time frame.	Speed of service performance (Section 6.9.2 – Conclusions 6.8-6.12)	The present research combines E-S-Qual's Items FUL2 and FUL3.	Combination
FUL3 It quickly delivers what I order.	Speed of service performance (Section 6.9.2 – Conclusions 6.8-6.12)	The present research combines E-S-Qual's Items FUL2 and FUL3.	Combination
FUL4 It sends out the items ordered.	Accurate service delivery (Section 6.9.3 – Conclusion 6. 13)	The present research agrees with E-S-Qual's Item FUL4.	Agrees in principle
FUL5 It has in stock the items the company claims to have.	*Not applicable*	The fulfilment of promises was not specifically addressed in the model proposed in the present research.	Deletion of service attribute
FUL6 It is truthful about its offerings.	*Not applicable*	The fulfilment of promises was not specifically addressed in the model proposed in the present research.	Deletion of service attribute
FUL7 It makes accurate promises about delivery of products.	*Not applicable*	The fulfilment of promises was not specifically addressed in the model proposed in the present research.	Deletion of service attribute
	Scope of the e-services offered (Section 6.9.1 – Conclusions 6.6 and 6.7.)	This was not part of E-S-Qual.	Additional
Privacy service determinant	*Security service determinant* (Section 6.12)	Different designations with partly a different scope are proposed in the model.	Modification with wider scope

PRI1 It protects information about my Web-shopping behavior.	*Not applicable*	This was less relevant, as the service quality is evaluated from the perspective of the tax practitioner and not the individual taxpayer.	Deletion
PRI2 It does not share my personal information with other sites.	*Not applicable*	This was not mentioned by responding tax practitioners.	Deletion of service attribute
PRI3 This site protects information about my credit card.	Protection of personal information (Section 6.12.1 – Conclusion 6.21).	The present research agrees with E-S-Qual's Item PR13.	Agrees in principle
E-RecS-QUAL dimension	**Assistance dimension** (Section 6.17)	Different designations for dimensions with the same scope are proposed.	Agrees in principle
Responsiveness service determinant	Assistance	As the responsiveness service determinant was the only service determinant relevant to the present research, the results of the assistance dimension in the proposed model encompass the results of the responsiveness service determinant. The responsiveness service determinant is the umbrella of all the service determinants identified in the present research.	Agrees in principle
RES1 It provides me with convenient options for returning items.	*Not applicable*	This was not mentioned by responding tax practitioners	Deletion of service attribute
RES2 This site handles product returns well.	Accurate service delivery (Section 6.18 – Conclusion 6.25) Knowledge and Skills of employees (Section 6.19.1 – Conclusion 6.26) Willingness of employees (Section 6.21.2 – Conclusion 6.30)	The present research splits E-S-Qual's Item RES2 into three different items, accurate service delivery, knowledge and skills of employees and willingness of employees. The evaluation of all three these items mentioned in the present research will, in combination, probably evaluate E-S-Qual's Item RES2.	Modification

RES3 This site offers a meaningful guarantee.	*Not applicable*	*Not applicable*	Deletion of service attribute
RES4 It tells me what to do if my transaction is not processed.	Content of the user guide (Section 6.19.2 – Conclusion 6.27)	The present research agrees with E-S-Qual's Item RES4.	Agrees in principle
RES5 It takes care of problems promptly.	Waiting time (Section 6.20 – Conclusion 6.28) Speed of performing the service (Section 6.21.1 – Conclusion 6.29)	The present research splits E-S-Qual's Item RES5 E-S-Qual into two different items: waiting time and speed of performing the service. The evaluation of both the items mentioned in the present research will, in combination, probably evaluate E-S-Qual's Item RES5.	Modification
Compensation service determinant	*Not applicable*	The compensation service determinant is not addressed in the present research.	Deletion of service determinant
COM1 This site compensates me for problems it creates.	*Not applicable*		Deletion of service attribute
COM2 It compensates me when what I ordered doesn't arrive on time.	*Not applicable*		Deletion of service attribute
COM3 It picks up items I want to return from my home or business.	*Not applicable*		Deletion of service attribute
Contact service determinant	*Not applicable*	The contact service determinant is not addressed in the present research.	Deletion of service determinant
CON1 This site provides a telephone number to reach the company.	*Not applicable*		Deletion of service attribute
CON2 This site has customer service representatives available online.	*Not applicable*		Deletion of service attribute
CON3 It offers the ability to speak to a live person if there is a problem.	*Not applicable*		Deletion of service attribute
Perceived value dimension	**Perceived value dimension** (Section 6.14)	Perceived value dimension in both models.	Agrees in principle
1. The prices of the products and services available at this site (how economical the site is).	*Not applicable*	Whether the prices of goods and services are economical is not relevant to the present research.	Deletion of service attribute

2. The overall convenience of using this site.	Convenience (Section 6.15 – Conclusion 6.24)	The present research agrees with E-S-Qual's Item 2 under E-S-Qual's perceived value dimension.	Agrees in principle
3. The extent to which the site gives you a feeling of being in control.	*Not applicable*	As the relationship between SARS and the tax practitioner is compulsory and most of the required actions are legally prescribed, the tax practitioner could not experience the same degree of control in the relationship.	Deletion of service attribute
4. The overall value you get from this site for your money and effort.	*Not applicable*	The only relevant value aspect is the convenience aspect and this measurement would result in a duplication of the convenience measurement.	Deletion of service attribute
	Incentive (Section 6.16 – Conclusion 6.25)	Incentive aspects are not addressed in the present research.	Addition
Loyalty intentions dimension	*Not applicable*	Loyalty intentions not addressed in the present research.	Deletion of service dimension
How likely are you to . . .			
1. Say positive things about this site to other people?	*Not applicable*	*Not applicable*	Deletion of service attribute
2. Recommend this site to someone who seeks your advice?	*Not applicable*	*Not applicable*	Deletion of service attribute
3. Encourage friends and others to do business with this site?	*Not applicable*	*Not applicable*	Deletion of service attribute
4. Consider this site to be your first choice for future transactions?	*Not applicable*	*Not applicable*	Deletion of service attribute
5. Do more business with this site in the coming months?	*Not applicable*	*Not applicable*	Deletion of service attribute
	Global evaluation of e-service quality (Section 6.13 – Conclusion 6.22)	A global evaluation of e-services is not addressed in E-S-Qual.	Addition

7.8 COMPARISON OF THE PARTS OF THE SERVICE QUALITY MODEL FOR THE TRADITIONAL SERVICES AND THE E-SERVICES

The results of the present research confirm the conclusions of various authors who found that, on the whole, the service quality evaluations of traditional and e-services tend to differ. There are, however, also some similarities between the two parts of the service quality model.

When the total service quality of SARS is to be evaluated, it is important to ensure that a specific service aspect is evaluated only once. It is therefore deemed helpful to present the results of a comparison between the two parts of the service quality model here. To ensure that any duplication is eliminated, the focus of the comparison is mainly on the similarities between the two parts.

7.8.1 Structural comparison

The part of the service quality model for the traditional services uses a group of three different service quality dimensions, namely functional quality (the “how”), technical quality (the “what”) and an image dimension (“by whom”). The e-service quality model is also divided into three different distinct dimensions. The first is the normal operations service quality dimension, the second is the perceived value dimension and the third is the assistance dimension. Both the traditional service quality model and the e-service quality model are based on a hierarchical approach to service quality. Both models also divide each dimension into various service determinants, service attributes and service aspects.

7.8.2 Comparison of service determinants

Although the dimensions for the traditional services and the e-services are defined differently, some of the service determinants identified were found to be relevant to both service modes. The following service determinants identified as relevant to the traditional services across all three service quality dimensions were also relevant to the assistance dimension of the e-services:

- reliability;
- assurance;
- empathy; and

- responsiveness.

In the model, the fulfilment service determinant for the e-services is defined more broadly than the responsiveness and reliability service determinants for the traditional services. For the e-services, the responsiveness and reliability of the service provider are both included as part of the fulfilment service determinant.

The service determinant of tangibles identified for the traditional services was not found to be relevant to the service quality of the e-services. Although the service determinant of tangibles influences the functional quality of the traditional service experience, tangibles is also an important communicator of the image dimension of the traditional services. For the e-services, the only tangible measurable relates to the computer and Internet connection, and it would appear that the role of the image dimension (in so far as it is relevant at all) is less important in the e-service environment than in the traditional service environment.

7.8.3 Comparison of service attributes

It was further established that several service attributes were relevant to both the service quality of the traditional services and the e-services. The service determinants and service dimensions to which such a service attribute is allocated are, however, not defined in the same way for the traditional and the e-services. The following service attributes relevant to the traditional services are also relevant to the e-service quality model:

- accurate service delivery;
- speed of performing the service;
- willingness of employees;
- waiting time;
- knowledge and skills of employees; and
- convenience of location and operating hours.

7.8.3.1 Accurate service delivery

Accurate service delivery could relate to the normal day-to-day services (hereafter referred

to as “normal services”), or it could refer to the recovery services.

(a) Normal services

For the traditional services, accurate service delivery and service failures were classified under the reliability service determinant in the functional service quality dimension (see Section 5.11.1 and Conclusions 5.49 and 5.52). For the e-services, accurate service delivery was included in the fulfilment service determinant in the normal operations service quality dimension (see Section 6.7.3 and Conclusion 6.10). Elements of accurate service delivery found to relate to normal services relevant to both the traditional service and the e-service quality were making the correct tax returns available, the tax assessment and tax payment business processes.

(b) Recovery service aspects

For the traditional services, the service attribute of accurate service recovery was classified under the reliability service determinant (see Section 5.11.1 and Conclusions 5.50, 5.51 and 5.52). For the e-services, the service attribute of accurate service delivery of the assistance (recovery) service aspects was also classified under the reliability service determinant, but in the assistance service dimension (see Section 6.18 and Conclusion 6.26).

7.8.3.2 Speed of performing the service

The service attribute of the speed of performing the service, as identified for the traditional services (see Section 5.8.1.1 and Conclusion 5.6) was also found to be relevant to the e-services when assistance was required through e-filing e-mail (see Section 6.10.5.1 and Conclusion 6.22). The speed of performing the service was therefore classified in the functional dimension of the traditional services under the responsiveness service determinant. For the e-services, the service attribute of the speed of performing the service was also classified under the responsiveness service determinant, but in the assistance service dimension.

For both the traditional and the e-services, the service attribute of the speed of performing the service was divided into two different service aspects, namely turnaround time and the timeliness of updates.

There are three business processes within the turnaround time service aspect that are also relevant to the traditional services:

- tax assessments (see Section 5.8.1.4 and Conclusion 5.9 and Section 6.7.2.1 and Conclusion 6.5);
- tax refunds (see Section 5.8.1.5 and Conclusion 5.10 and Section 6.7.2.1 and Conclusion 6.6); and
- the dispute resolution process (see Section 5.8.1.3 and Conclusion 8 and Section 6.7.2.1 and Conclusion 6.7).

For the e-services, the service aspect relating to the timeliness of updates (see Section 6.7.2.2 and Conclusion 6.8) includes an item referring to the timeliness of the availability of the tax returns that is also relevant to the traditional services (see Section 5.8.1.6 and Conclusion 5.11).

7.8.3.3 Willingness of employees

In the model for the traditional services, the willingness of the employees service attribute (see Section 5.8.1.2 and Conclusion 5.15) was classified within the functional quality service dimension under the service determinant of responsiveness. For the e-services, the willingness of the employees providing assistance through the e-filing call centre was found to be relevant (see Section 6.10.5.2 and Conclusion 6.23) to the assistance dimension, and it was also included under the responsiveness service determinant.

7.8.3.4 Waiting time

For the traditional services, the service attribute of waiting time (see Section 5.10.1 and Conclusions 26 and 27) forms part of the functional quality dimension under the empathy service determinant. For the e-services, the waiting time service attribute (see Section 6.20 and Conclusion 6.29) was found to be relevant to the e-filing call centre. It was therefore classified in the assistance service dimension, and also under the empathy service determinant.

7.8.3.5 Knowledge and skills of employees

For the traditional services, the knowledge and skills of the employees (see Section 5.9.1 and Conclusion 16) service attribute was classified in the functional service quality dimension under the assurance service determinant. For the e-services, the knowledge and skills of the employees providing assistance through the e-filing e-mail and call centre were found to be relevant. This service attribute was therefore classified in the assistance service dimension, and also under an assurance service determinant (see Section 6.19 and Conclusion 6.27).

7.8.3.6 Convenience of location and operating hours

Although convenience was not identified as a service determinant on its own for the traditional services, two aspects relating to convenience, namely the convenience of the location of branches (see Section 5.10.6 and Conclusion 5.47) and the convenience of SARS's operating hours (see Section 5.10.6 and Conclusion 5.48) were specifically included in the traditional services. These convenience aspects are included as part of the empathy service determinant for the traditional services and are closely related to the "where I want it" (see Section 6.15.6) and "when I want it" (see Section 6.15.4) e-service attributes classified under the convenience service determinant in the perceived value dimension of the e-service quality model. In principle, these service attributes are in agreement, but, in the traditional services, only the branch service channel is included in the service quality model. For the e-services, only the e-filing and website service channels are evaluated. The traditional service quality model provides for the evaluation of each of the two service attributes referred to. The e-service quality model only provides for a global evaluation of all aspects relating to convenience.

7.8.4 Effect of the duplicated service attributes

Although it is important that all the aspects addressed in the service quality model are included in the initial survey instrument, it is not necessary that the actual layout of the survey questions should mirror the order in the service quality model. The relevance of the service quality model is to ensure that the service quality is correctly evaluated at the levels of service attribute, service determinant and service dimension. It is therefore highly relevant that the structure is used in analysing the results. It does not matter where the

overlapping items are included in the survey instrument and the preference of the researcher, together with the feedback from the pilot group on which the first survey instrument will be tested, will most probably determine the best position in the survey instrument for the overlapping items.

The overlapping service quality aspects should only be included in the survey instrument once. The results of the overlapping items should be included when the service quality of SARS is measured as the sum of all the relevant service aspects that contribute to the quality of the services SARS provides. When, for example, a conclusion on the reliability aspects of SARS is required, all the aspects relating to reliability should be included (that includes the overlapping service aspects). When a conclusion is required for the e-service quality on its own, again all the aspects relevant to e-service quality should be included to arrive at a more reliable conclusion.

7.9 RESEARCH IMPLICATIONS

7.9.1 General

The present research is the first qualitative study designed to build the “lens of the customer” in evaluating the service quality of a revenue agency. The “lens of the customer” encompasses the different service attributes, service determinants and service dimensions that are relevant in the evaluation by tax practitioners of the service quality of a revenue agency (SARS).

The results of the present research confirm the findings in the current literature which suggest that, in building the “lens of the customer”, a distinction must be made between the traditional service modes and the e-service modes. The present research therefore proposes both a traditional service quality model and an e-service quality model. In addition to the detailed service attributes and service determinants in the models that are presented in the present research, the findings also support the conclusion by Dabholkar *et al*. (2000) that a global evaluation of services should also be incorporated into the service quality models.

7.9.2 Traditional service quality

For the traditional service quality model, the distribution of the service attributes and service determinants over all three service quality dimensions defined by Grönroos (1984, 1988) may provide additional evidence of the existence of these three service dimensions – the functional quality, the technical quality and the image dimensions. The fact that different service aspects of the same service determinant were found to be relevant to different service quality dimensions supports the conclusions of Gummesson (1992) that a specific service determinant could be valid for more than one service dimension (refer Section 3.3.6).The results of the present research also support Grönroos's (1984:41) findings, which suggested that functional quality is more important to the perceived service quality than technical quality.

It must also be noted that both SERVQUAL and the present research propose the use of five service determinants in order to evaluate the quality of traditional services. However, while the names and general meaning of the service determinants are the same, the definitions of the determinants used in the present research differ in some instances from those used in SERVQUAL. The results of the present research therefore support the views of Parasuraman *et al*. (1991a:440), who found that the five-dimensional structure of SERVQUAL serves as a meaningful conceptual framework for summarising the criteria customers use when assessing service quality.

In the present research, responsiveness was allocated the highest number of critical incidents, with empathy and assurance taking second and third place respectively. The fact that the reliability determinant in the present research received, firstly, the second lowest number of critical incidents, and, secondly, substantially lower responses than the highest three service determinants, could indicate that there may be a difference between the importance of these determinants, either in different service sectors or in public and private institutions. Given that Berry *et al*. (1988:37) found reliability to be the most important determinant of quality, irrespective of the service type, the results of the present research may indicate that the service environment (whether it is in the public or private sector) could influence the relative importance of various service determinants. Further research should be conducted to confirm this finding.

The differences that were identified between the proposed traditional service quality model and SERVQUAL support the views of Parasuraman *et al*. (1988) and Parasuraman *et al*. (1991a) that appropriate adaptations of the instrument may be desirable when only a single service provider (as is the case in the present research) is to be investigated.

The results of the present research also support the views of Foster and Newman (1998), Wisniewski and Donnelly (1996:5) and Wisniewski (2001a:996), who argue that the use of the SERVQUAL instrument (in this case, the adapted SERVQUAL instrument) is not limited to the private sector but that it has considerable potential for managers and other decision-makers in a public sector organisation.

7.9.3 E-service quality

The first important finding in the development of the e-service quality model is that the number of positive responses for the e-services exceeded the number of negative responses for both the website and for e-filing. This phenomenon is an exception in the application of the critical incident technique. The reason for this finding may be that with its e-services, SARS is providing options that are rare in public administration in South Africa. It is therefore possible to conclude that the number of positive responses may exceed the number of negative responses in critical incident studies when a service provider exceeds the minimum service delivery standard requirement expected by the customers.

A second important finding is the fact that only three of the four e-service dimensions identified by Parasuraman *et al*. (2005:220) were considered to be relevant to the present research. This finding in the present research supports the results of a study by Boshoff (2007:110), who found that the E-S-Qual's four-dimensional configuration is not necessarily valid for all service settings.

Thirdly, it was found that four of the five traditional service determinants were also relevant to the e-services, namely responsiveness, reliability, empathy and assurance. Tangibles is the only service determinant of the traditional services that was not relevant to the e-services. By contrast, the e-service quality model encompasses six service determinants that were found to be relevant only to the e-services SARS provides, namely the fulfilment, convenience, efficiency, assistance and security service determinants.

Finally, the fact that the respondents regarded the fulfilment service determinant as the most important service determinant for the e-services in the present research, with the efficiency service determinant in third place (clearly also regarded as very important), supports the findings of Lee and Lin (2005:171), Parasuraman *et al*. (2005), Wolfinbarger and Gilly (2003:196) and Yang *et al*. (2004).

7.10 CRITICAL EVALUATION OF THE PRESENT RESEARCH

The service quality models proposed in the present research are based on the results of a qualitative study using the critical incident technique. A critical evaluation of the present research process could enhance the quality of future research.

The first possible improvement relates to the content of the data gathering instrument used to report the critical incidents. Although the results of the study were found to be reliable (see Section 4.10), it was clear that some respondents did not really understand what was required of them. This reduced the number of usable critical incidents identified for the purposes of the present research. The fact that some respondents did not understand certain questions also resulted in the allocation of a number of critical incidents to a general classification. An example of a critical incident could have been given together with the questions and might have resulted in even more critical incidents being identified from the data. It was originally decided not to include an example in the questionnaire because such an inclusion might have focused attention on a specific service mode or process and was therefore potentially a source of bias but, although the consequences of the addition of an example to the data gathering instrument are unknown, it might still have been beneficial to add an example to increase the usability of the data gathered. The 5 416 critical incidents identified is, however, regarded as sufficient, even if the 221 general responses for the traditional services are disregarded.

The second possible improvement relates to the importance rankings of the service determinants and the service attributes. In the present research, they are ranked according to the frequencies of the relevant reported critical incidents. It may be argued that the importance rankings should be based on some other variable, but no other information was available either to support or to refute the method used in the present research.

Another possibility for analysis might have been an importance ranking that was not only based on frequencies, but on a ranking of the responses per respondent, where the first service delivery issue a specific respondent mentioned might have carried more weight than the last service delivery issue mentioned by that same respondent. Even if there had been a precedent for such a weighting, however, it was not possible in the present research. The reason for this is that the negative and positive critical incidents requested were not elicited in only one question, but in four different questions dealing with different aspects of the services provided by SARS. It may therefore be argued that something that is listed as the third negative critical incident in Question 2 is of greater importance than the first critical incident mentioned in Question 4. Future studies could attempt to investigate balancing the importance of having more than one question with the possible benefits of the ranking of importance, when only one question is used in the data capturing instrument.

A third concern of the present study is the possible impact that other questions included in the data-gathering instrument administered by SARS might have had on the results of the present research. As the open-ended questions of the web-based questionnaire for the present research formed part of a bigger questionnaire, it is possible that some of the questions that were asked before the questions relevant to the present research might have had an impact on the results of the present research – this impact was not measured. The questions asked before these four questions were, however, investigated and it was found that they were mainly demographic in nature except for

- some closed-ended questions that requested the identification of the biggest challenges of the tax profession and addressed issues on communication between SARS and the tax practitioner; and
- an open-ended question that addressed the relationship between SARS and the tax practitioner.

The impact that the aspects referred to above might have had on the results could not be measured, but it is submitted that the impact of these aspects would not have been

material to the outcome of the present research, because

- the respondents to the distributed questionnaire who answered only the four applicable questions also found both the above aspects relevant; and
- the above items did not attract a number of responses that exceeded the number of responses for the other service aspects – in fact, they received fewer responses.

Another possible confounding factor that could not be eliminated is related to the fact that the web-based questionnaire was distributed through SARS channels. This may have had an effect on the responses.

7.11 THE WAY FORWARD

Although the present research serves as the first groundbreaking step in the development of a service quality model for SARS, the results provide only theoretical frameworks for the evaluation of the service quality as perceived by tax practitioners. Further research is needed to develop the measuring instrument itself and to design items, questions or statements to encapsulate these service determinants and service attributes and to develop rating scales and the relevant instructions. A reliable and concise measuring instrument is needed to enable SARS (or any independent third party) to conduct research into the quality of its services to tax practitioners.

The research leading to the development of the model or framework was carried out at a particular time and in a particular context. SARS has only recently adopted a customer-focused approach to quality, as tax practitioners were only recently required to register with SARS and e-filing has only recently been introduced and expanded. This would of necessity colour the nature of the critical incidents reported. Nomdoe and Pather (2007:104) also found that different stakeholders tend to evaluate services on different levels. As the framework proposed in the present research are based on the “lens of the customer”, who in this case were tax practitioners, representing only one stakeholder among many in SARS, it is possible that the framework will require adjustment if the service quality is measured from the perspective(s) of other stakeholders (for example, the taxpayers). Indeed, the results relating to the confidentiality service attribute (see Section 5.9.6) indicated that some measures that would benefit one specific stakeholder (in this case, the individual taxpayer) might frustrate another stakeholder (the tax practitioner). The framework should thus be validated using a test population from another stakeholder

group before it can be applied to measure the service quality of SARS from that stakeholder's perspective.

Although the results of this research represent the first service quality model in the tax agency environment that was developed in the South African context and based on the "lens of the customer", it remains to be seen whether or not target populations in other countries perceive quality in the same fashion. Donnelly and Shiu (1999:498) suggest that culture may influence service quality perceptions. Further research is required to establish the international relevance of the proposed service quality model.

Finally, quality improvement is a dynamic process. As certain aspects are improved, others assume greater importance. Any measuring instrument based on the model proposed in this research would possibly prioritise certain quality criteria above others.

7.12 CONCLUDING REMARKS

Tax revenue forms the backbone of the South African economy. This underlines the need to enhance taxpayer compliance. The quality of the services provided by SARS is crucial, as service quality directly influences the burden of complying with tax obligations, and hence directly affects the tax compliance climate in a country. Oberholzer (2008:245) also recently found that South African taxpayers' perceptions influence their attitudes towards tax compliance and that it is important for the State to build a close relationship between itself and taxpayers.

It is therefore of the utmost importance that the perceptions of tax practitioners with regard to the public image of SARS be determined, so that this information can be used to refine any service strategies developed to ensure that tax compliance in South Africa improves even further.

In order to establish the perceptions of tax practitioners with regard to the quality of SARS's service, a model of service quality is required. The present research has proposed a framework for such a service quality model for both the traditional services and the e-services provided by SARS. This framework could be used as a basis for studies to establish the perceptions of tax practitioners with regard to the quality of SARS's service. The conceptual model of service quality that is proposed could also enable SARS to identify quality problems and assist SARS to plan for the launch of a quality improvement

programme, and thereby to further improve the efficiency and overall performance of SARS.

With regard to the research on the service quality of SARS, the present research provides a basis for other researchers and may also stimulate the momentum of service quality research in the tax agency environment. The famous quote by Winston Churchill ([1942] 2008) sums it up:

> *Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning.*