A competitor analysis approach towards evaluating single-choice information technology service provision to the parastatal sector of South Africa

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ABSTRACT

Service provision agreements, which restrict users to single service suppliers, are bound to impact on the long-term survival of such service providers. This is particularly true if such a business strategy is not guided by sound management principles, necessary skills and a strong competitor focused culture. In the absence of these essential principles, user demand and preferences will gradually shift towards competitor suppliers. To investigate this theory, this article examines the importance of service users in the information technology (IT) parastatal industry of South Africa. The article presents a case study whereby the service performance of a single-choice information technology service provider in the parastatal industry of South Africa is measured against multi-choice private service providers without any provisional agreements. The outcome of the case study reveals that single-choice service provision options with provisional agreements have a limited chance of success if not supported by strong service user inputs and an active focus on competitor analysis to protect market share inherited by the single-choice service provider. In fact, poorly developed competitor analysis capability of single-choice service providers is likely to hinder its ability to match the service levels of private service providers, thereby creating frustration amongst service users who face increasing pressures to deliver greater outputs from within their organisations and from external customers through the use of IT services from service providers. Moreover, provisional strategies that disallow sound competition amongst service providers are bound to impact negatively on user preferences as well as information technology skills development opportunities which are required to improve service provision generally and long-term survival in particular.

INTRODUCTION

Since 2000 the information technology parastatal industry of South Africa has witnessed restructuring initiatives featuring the consolidation of information technology functions into a single-choice parastatal service provider format (Department of Public Enterprises, 2001). Alongside these developments, enabling agreements were fixed with various parastatals which restrict information technology demands to a single-choice parastatal service provider.

The enabling agreement has caused huge frustration and dissatisfaction amongst service users who now are limited to a single information technology service supplier. This frustration/dissatisfaction largely stems from experience gained by service users who previously, and currently, are still dealing with other private service providers. This frustration/dissatisfaction is further

> The Enabling Agreement (EA) in the parastatal industry of South Africa argues that the single-choice information technology service provider will have 'first right of refusal' over all information technology services required by its final customers. The implication of this agreement is that service users in the parastatal industry can only engage the services of other service providers if the newly established single-choice information technology service provider is unable to provide the services required, or if it specifically refuses to perform work requested, or if agreements with other service providers existed prior to the formation of the newly formed service provider.

triggered by doubts amongst service users that their information technology needs are largely unmet in the parastatal industry mainly due to a lack of understanding of their strategic needs. Poor service delivery and inadequate skills to effectively resolve service problems further places a threat on the ability of service users to meet their own organisationally imposed performance targets. Ultimately the tumultuous nature of activities in the information technology environment of the parastatal industry of South Africa has caused uncertainty and low confidence amongst service users.

AIMS

Key to addressing these uncertainties and as an effort to contribute to potential solutions to change the negative perceptions and efficiency of the information technology parastatal industry, this article presents the views of parastatal organisations (service users) regarding key criteria for service delivery measurement. The aim is to evaluate (through statistical testing) whether there is a need for competitor analysis by single-choice parastatal service providers, who compete against private service providers who do attach importance to such a practice. The competitor analysis is presented in the form of a comparative model whereby information technology service delivery performance levels of a single-choice parastatal IT service supplier are measured against private service suppliers providing the same or similar services (the services which the entities have in common to enable comparison are listed in table 1 of this article). To this end, the following null and alternative hypothesis was formulated:

$$H_0: \quad \mu_1 = \mu_2$$
$$H_1: \quad \mu_1 \neq \mu_2$$

Here μ_1 and μ_2 represent the population average satisfaction levels with service performance for the single-choice parastatal service provider and private service providers respectively.

The null hypothesis sets out to test whether the average service performance levels of the single-choice parastatal service and private service providers differ significantly. For those service performance measures which show statistical significant differences, the under or over performance levels of the single-choice parastatal service provider could be identified with the aim of improving future customer relations, skills and service performance levels in the parastatal industry of South Africa in order to improve the competitive capability of the organisation overall. The outcome of the competitor analysis represents an evaluation that contributes to a sound service delivery framework that the parastatal and broader information technology service industry can utilise to improve quality service delivery in general and skills in particular.

RESEARCH METHODOLOGY

A descriptive research model was designed in support of the competitor analysis. As input to designing a research instrument to collect primary data amongst parastatals using information technology services, an adjusted version of Aaker's (1998) service delivery framework model was used. The service delivery framework model is discussed below.

A self-administrated survey approach was used to collect primary data amongst 90 key parastatal IT management staff (total population). For this purpose a research instrument (questionnaire) was designed. The questionnaire measured approximately 25 service delivery criteria on a 10-point Likert scale. A full 83.3% of the parastatal respondents self-completed and returned the questionnaire. All responses were edited, coded, captured and analysed to finally allow for some interpretations related to the study aims outlined above.

COMPETITOR ANALYSIS FRAMEWORK MODEL

Competitor analysis is an essential and ongoing exercise that entails identifying and understanding an organisation's current and potential competitors, and evaluating their ability to threaten its position in the market (Aaker 1998:58–9). Stalk and Lachenauer (2004:64) refer to seasoned and well-organised competitors as "hardball players" who pursue competitive advantage single-mindedly. Such organisations are successful because they choose their targets carefully, seek out well-timed competitive encounters, set the pace of innovation and continually test the boundaries of what is possible. As a result, the single-choice service provider in South Africa competes against organisations that may take cognisance of the enabling agreement, but are willing to test the validity of it in the pursuit of customer satisfaction and service provision to parastatal customers for the sake of their own survival. As a result, competitor analysis should be of increasing importance to the single-choice parastatal service provider as the enabling agreement may not serve as an absolute guarantee of protection of the parastatal market.

Competitor analysis should ideally enable the organisation to build stronger defences and provide a foundation for outmanoeuvring the competition in order to gain market position (Brassington & Pettitt 1997:849). Aaker's (1998:45) service delivery framework focused on certain broad areas that related to customer analysis. With the adoption of an appropriate approach to data gathering and statistical analysis using a paired sample approach, this framework, with modifications, would also be able to serve as a platform for competitor analysis. The following broad areas of Aaker's framework are as follows:

- Customer segmentation and fulfilling customer needs
- Customer motivations to purchase
- Unmet needs of customers and/or customer dissatisfaction

Based on the nature of the information technology (IT) service delivery environment in South Africa, the framework model outlined above was modified by focusing on separating 'unmet needs of customers and/or customer dissatisfaction'. Furthermore, 'customer segmentation and fulfilling customer needs' were not focused on for the purpose of this article, as these were considered to be of importance with respect to customer-based approach to service management rather than competitor analysis specifically. Hax and Wilde (1999:21) also approached the above analysis with a similar view that advocated a process-oriented view for organisations linking strategic intent to execution. The components of their approach were:

- Operational effectiveness (the delivery of products and services cost-effectively to the customer,
- Customer targeting (activities that attract, satisfy and retain the customer), and
- Innovation (a future-focused orientation that seeks to be at the forefront of value creation for customers in order to maintain the organisation's viability).

Hax et. al. (1999:28), in keeping with the framework adopted for the purposes of this article, also recognise the need for customer-focused strategic approaches to creating unassailable competitive advantage, hence the modification of the framework above.

According to research findings based on data gathered on the South African IT industry (IDC 2002:22), certain information is also known about the service offerings common to competitors and to the single-choice service provider. These private service providers also sell services provision to parastatal service users within the single-choice service providers business environment thereby enabling meaningful comparison of research data in the competitor analysis context of this article.

The service provision areas common to both the single-choice service provider and competitors are illustrated in Table 1 below.

Table 1: Common areas of service provision by competing service providers

Key areas of focus
Hardware & software integration & support, IT Infrastructure management & professional services
Systems integration & business consulting services
Software provider, business consulting, professional services
Business technology consulting & outsourcing

As a result, the modified components of Aaker's model as well as the common service offerings provided formed the parameters of assessment of the single-choice service providers performance against that of private service providers. The three competitor analysis parameters as well as the criteria for each are illustrated in Table 2 below.

Establishing unmet customer needs

Aaker (1998:53) considers customers' unmet needs to be those needs that are not being met by existing product offerings. Rather than merely asking customers for their requirements, some organisations succeed by innovatively leading customers proactively towards where they are heading before they realise that it was necessary (Hutt & Speh 2004:315–16). In order to do this, deep insights are required into the needs of current and future customers to enable the organisation to plan and execute such initiatives. "Today customers want commitment from those who serve them. In our diverse and turbulent markets, some customers want respect as individuals; others seek consistency; more customers expect suppliers to learn to keep track of their changing lifestyles; in addition they require value for money in terms of their available incomes" (Shaw 1996:71). Shaw's observation applies equally to the single parastatal service provider and the expectations that its parastatal customers have of it.

Successful identification of unmet customer needs may have significant implications for the organisations that initially discover them, because they

Table 2: Competitor analysis criteria

Establishing unmet customer needs	• Regularly provides creative solutions not yet considered • Proactive provision of R&D information for the business • Demonstration of thought leadership in the IT field • Thought leadership advisor of choice for the business
Overall customer satisfaction with service delivered	• IT service problems resolved within agreed times (as specified in service level agreements – SLAs) • All complaints followed up efficiently • Regular feedback provided on the status of serious problems being attended to • Service staff perceived as reliable and well-skilled in providing the required service • The service provider regularly delivers high quality proposals for new work (i.e. error free and timeous delivery) • Satisfaction with the overall level of service provided by the service provider
Service provision criteria	• IT/IS consulting ability • System integration ability • IT systems maintenance & support • Application (software) development • Outsourcing

could result in a competitive advantage for the organisation, especially in highly competitive industries (Urban & Hauser 2002:22). Unmet needs afford an organisation opportunities to increase market share or access other markets that would ordinarily be difficult to penetrate using conventional techniques. Regular discovery of these needs may be more important in certain industries than in others. In high-tech industries such as the one in which the single parastatal service provider operates, changes are rapid and product obsolescence cycles short. Hence current market research analyses may not be as reliable for the purposes of discovering and satisfying customer needs in businesses dealing with high-tech products (Von Hippel 1986:791). Von Hippel, Thomke and Sonnack (1999:47) also argue that organisations would prefer to focus on an incremental approach as there is a tendency to focus on survival and a shortern outlook, often at the expense of breakthrough innovation in the long-term. The study, conducted with service users, involved an understanding of whether the single parastatal service provider adequately possessed the knowledge and capacity to understand its business environment and the energy industry in general. Moreover, the study sought to uncover whether the single parastatal service provider was appropriately equipped to help service users through crucial transformation that they are currently undergoing in the information technology and information management processes in their business environment.

Overall customer satisfaction with service delivered

Customer dissatisfaction (or satisfaction) relates to a comparison of customer expectations about a particular product and supporting service against the actual performance of the product and supporting services (Cravens 1997:143). However, prior experience may also provide a basis of comparison of such expectations. Experiences with poor-quality products or services often generate customer dissatisfaction. Hence a dissatisfied customer could conceivably tell up to eleven other people of their dissatisfaction with an organisation's service and/or products, which is two to three times more people than a satisfied customer is likely to speak to if they experience good service (Brassington & Pettitt 1997:95).

The study conducted amongst service users also reviewed its overall satisfaction with the quality of the single parastatal service provider's service delivery. Service quality is best conceptualised as an attitude based on the customer's "perceptions" of performance (Nowak & Wasburn 1998:442). Barnes (2001:33) reflected on the correlation of customer satisfaction to the value derived from their interactions with the organisation selling the relevant product or service. He concluded that organisations need to go beyond viewing customers as targets to whom organisations merely sell products and services, and that they need to define value more broadly than product and price alone. By implication the authors advocate that organisations move beyond viewing the customer as a commodity towards valuing the customer in a manner that is reflected in the attitude adopted towards the quality of service delivery and resultant customer satisfaction. As the parastatal market becomes increasingly diverse and performance-driven, the proliferation of private service providers into these organisations is likely to increase regardless of the existence of provisional agreements. Customer satisfaction with service delivery are the hallmarks of such organisations who have global presence and vastly greater experience in maintaining cultures that are customer-centric. As a result, their ability to provide comparative services that aid service users to meet their own performance outputs is likely to provide a formidable alternative to the single-choice parastatal organisation which is guided by service provision agreements which are likely to breed complacency and a culture of entitlement.

ANALYSIS OF RESEARCH RESULTS

Given that the research problems/aims are based on the outcome of the stated hypothesis, the analysis below features the results from of the paired sample t-test. This test was applied to determine statistically significant differences in the average performance levels of the single-choice parastatal service provider and private service providers. As a result, this test enables us to evaluate whether there is a need for competitor analysis by single-choice parastatal service providers, who compete against private service providers who do attach importance to such a practise. The paired sample t-test analysis is presented in Table 3.

The output of the paired sample t-test reflects the means and standard deviations of the two variables, and their standard error, confidence intervals and the differences between the means and their standard error. The *t*-value and associated two-tailed probability are also shown. The *t*-value is calculated using the following formula:

$$t = \frac{x_1 - x_2}{\sqrt{\frac{s^2}{n}}}$$

Table 3 shows the mean scores that reflect the difference between the average service performance ratings provided to the different service performances of the single parastatal service provider and private service providers. The significant test statistics (Sig. 2-tailed) for all service criteria indicates that all 25 service criteria evaluations for the single parastatal service provider and other service providers are not the same ($p < 0.05$). *The null hypothesis* (H_0: $\mu_1 = \mu_2$) *that the mean difference between the average ratings for the single parastatal service provider and other service providers are the same (zero), is therefore rejected for all service delivery and provision criteria in favour of the alternate hypothesis* (H_1: $\mu_1 \neq \mu_2$). The difference observed between the service performance of the single parastatal service provider and private service providers were due to chance less than 5 out of 100 times. Indeed, judging from the average mean values of the sample statistics, the average service performance ratings are lower for the single parastatal service provider on all 25 service delivery criteria.

Based on the analysis presented above, as well as the broad objectives, each service delivery parameter merits some final comments.

Unmet customer needs (Table 2, pairs 1 to 4)

The private service provider scored highest for proficiency of thought leadership and for the provision of innovative creative solutions. The proactive provision of research and development information, and service users' preference for the organisation to be the preferred thought leadership advisor of choice scored equal mean ratings that were also in favour of the private service provider. Overall, the single-choice parastatal service provider was rated below the private service providers. From the analysis of the results in this section it is clear that the single-choice service provider has not considered the need to be proactive and to demonstrate thought leadership for the sake of future-oriented solution crafting to be an imperative. This tendency is understandable given its previous manner of operation as a collection of IT departments within the parastatal environment prior to consolidation as a single-choice service provider. The transition from an internal department to an external entity as a single-choice service provider did not encompass the change from a reactive business outlook to one of proactive service management and solution delivery as in the case of private service providers.

Customer dissatisfaction (Table 2, pairs 5 to 10)

Overall, the single-choice parastatal service provider performed worse than the private service providers across all criteria.

Table 3: Paired sample test

Service delivery parameter	Pair	Rating criteria for single parastatal service provider and private service provider (both vendors are rated against this criteria to enable comparison of service delivery performance)	Paired differences					t	Df	Sig. (2-tailed)
			Mean	Standard deviation	Standard error	95% Confidence interval of the difference				
						Lower	Upper			
Establishing unmet customer needs (Pairs 1 to 4)	Pair 1	Regularly provides creative solutions not yet considered	-5.114	2.130	0.255	-5.622	-4.606	-20.088	69	0.000
	Pair 2	Proactive provision of R&D information for the business	-5.290	2.333	0.281	-5.850	-4.729	-18.832	68	0.000
	Pair 3	Demonstration of thought leadership in the IT field	-4.803	2.061	0.245	-5.291	-4.315	-19.639	70	0.000
	Pair 4	Thought leadership advisor of choice for the business	-4.899	2.059	0.248	-5.393	-4.404	-19.762	68	0.000
Overall customer satisfaction with service delivered (Pairs 5 to 10)	Pair 5	IT service problems resolved within agreed times (as specified in service level agreements - SLAs)	-4.478	2.602	0.318	-5.112	-3.843	-14.088	66	0.000
	Pair 6	All complaints followed up efficiently	-4.942	2.502	0.301	-5.543	-4.341	-16.406	68	0.000
	Pair 7	Regular feedback provided on the status of serious problems reported	-4.768	2.573	0.310	-5.386	-4.150	-15.391	68	0.000
	Pair 8	Service staff perceived as reliable and well-skilled in providing the required service	-4.549	2.096	0.249	-5.045	-4.053	-18.287	70	0.000
	Pair 9	The service provider regularly delivers high quality proposals for new work (ie. error free and timeous delivery)	-5.186	2.385	0.285	-5.754	-4.617	-18.189	69	0.000
	Pair 10	Satisfaction with the overall level of service provided by the service provider	-5.286	2.329	0.278	-5.841	-4.730	-18.988	69	0.000
Service delivery parameter	**Pair**	**Rating criteria for single parastatal service provider and private service provider (both entities are rated against this criteria to enable comparison of service delivery performance)**	**Paired differences**					**t**	**Df**	**Sig. (2-tailed)**
			Mean	**Standard deviation**	**Standard error**	**95% Confidence interval of the difference**				
						Lower	**Upper**			
Service provision criteria (Pairs 11 to 15)	11	IT/IS consulting ability	-4.857	2.108	0.252	-5.360	-4.355	-19.279	69	0.000
	12	System integration ability	-4.116	2.535	0.305	-4.725	-3.507	-13.846	68	0.000
	13	IT systems maintenance & support	-3.576	2.695	0.332	-4.238	-2.913	-10.779	65	0.000
	14	Application (software) development	-3.848	2.400	0.295	-4.439	-3.258	-13.026	65	0.000
	15	Outsourcing	-4.559	2.712	0.329	-5.215	-3.902	-13.862	67	0.000

This indicates a general level of customer dissatisfaction by service users with the single parastatal service provider, whilst the corresponding overall rating for the private service providers indicates a great degree of satisfaction with the quality of services received. As with the previous section (unmet customer needs, above) this tendency is understandable given its previous manner of operation as a collection of IT departments within the parastatal environment prior to consolidation as a single-choice service provider. The transition from an internal department to an external entity as a single-choice service provider did not encompass the concomitant transformation of the organisational mindset from a previously co-existing department mindset to a business-oriented, customer-centric mindset that emphasised customer satisfaction and formality above the assumption of familiarity with the service user in a prior context.

Service provision (Table 2, pairs 11 to 15)

The single-choice service parastatal provider performed worse than the private service providers in this section as well. This indicates that in a comparison of the service offerings at which the single-choice provider competes against the private service providers, the preference of the service users is such that there is an overwhelming preference for the use of private service providers. With the advent of performance management systems in the majority of parastatal organisations, service users who depend largely on information and information technology services for their outputs would undoubtedly prefer the use of service providers that are perceived to produce higher quality services. Greater reliance will invariably be placed on the outputs of reputable and well-established service providers who themselves are experienced competitors with a keen ability to circumvent barriers such as provisional service agreements.

CONCLUSIONS DRAWN FROM THE STUDY

The broad conclusion drawn from this study is that the single-choice service provider has not attached sufficient importance to the need for competitor analysis, and this is substantiated by the results achieved in each component of the study. The testing and evaluation conducted enabled us to establish that there is a need for competitor analysis by single-choice parastatal service providers, as they compete against private service providers who clearly significance to the practise as a matter of survival. In addition, the presence of other competitors and the consistency with which the single-choice parastatal service provider was outperformed by such organisations on the various criteria seems to indicate that service users are seeking alternatives where possible in order to prevent needless exposure to perceived poor performance from the single-choice parastatal service provider.

The research study has clear implications for the state's future planning and policy with regard to privatisation, as well as for large private organisations considering the unbundling of specific functions or entities (such as information technology departments or internal consulting departments) that exist within larger organisations. Large organisations and public utilities often develop cultures that emphasise entitlement and complacency, whilst lacking sufficient focus on entrepreneurial capability and customer centricity. It would seem that such has been the case with the single-choice parastatal service provider, the employees and management of which were accustomed to a parastatal environment. The organisation was evidently lacking in competitor analysis capability, resulting in the performance discussed above.

In reviewing the role of the need for a business-driven culture in the context of this study, the matter of recruiting the appropriate calibre of leadership can hardly be emphasised more, as this is the foundation upon which a successful transformation rests. This study has thus demonstrated the importance of leadership action focused on creating a customer-centric and service oriented paradigm that actively supersedes the original mindset and foundation. The research shows clearly that the single-choice parastatal service provider, which was accustomed to a parastatal environment where entrepreneurial activity and competitor intelligence gathering were never operational requirements, was not adequately prepared for the transition to a commercial entity.

Whilst the EA is able to provide the organisation with a finite source of protection from competition in the open market, the single-choice parastatal service provider may not be doing enough to build sufficient goodwill and a reputation within the customer base, primarily because it was never considered an imperative built into the strategic planning involved in the organisational design process. The importance of appointing leaders from external organisations who possess appropriate levels of emotional intelligence and technical proficiency should not go unattended.

In the information technology industry, as with many others, change is rapid and technology obsolescence is the rule rather than the exception. Organisations therefore do not possess the luxury of expansive periods of time over which to evolve a successful business model fashioned from trial and error made during the formative years of operation. Competition amongst service providers has become more intense over time, with more organisations competing for a limited number of business opportunities. In addition, organisations that purchase services are increasingly intent on obtaining value for money and therefore set stringent performance standards. Agile private service providers have developed the ability to change and adapt to these constantly evolving standards, whilst large and cumbersome organisations with culture characterised by complacency, entitlement and by bureaucracy are less able to do so. Competitor analysis is therefore an important tool which can be used to help organisations to focus on imperatives that are universally applicable and attributable to most, if not all, businesses.

The paired sample model can further be used to prioritise strategies to improve competitiveness in service provision as well as to benchmark organisational performance in an objective manner. The observed values obtained from the research conducted herein should serve as a guide to all organisations in South Africa undergoing similar transformation, in addressing areas of management that are likely to affect these organisations and their present and prospective customers. Three key areas namely, establishing unmet customer needs and customer dissatisfaction and comparing performance on common service offerings can now serve as a guide for initiatives to bring about organisational improvement. Whilst it is not proposed that organisations undergoing competitor analysis investigate exclusively the service offerings that they have in common with competing organisations, it does serve as a platform on which to formulate competitive strategies from basic principles.

The research described herein demonstrates the value of competitor analysis for organisations undergoing transformation to operate in new industries or environments. In South Africa, and indeed worldwide, state-owned organisations are increasingly required to either privatise or corporatise in order to operate in ways that mirror the performance of successful organisations in the private sector. Many such organisations would typically arise from resource-abundant, protected environments that do little to prepare them for operations in fast-paced, results-oriented environments. Prior leadership and organisational management practices and experiences and institutional cultures may therefore serve as inappropriate preparation for the management of the new organisations that result from privatisation or unbundling initiatives. Competitor-focused analysis and customer centricity are key imperatives that most private sector oriented organisations naturally incorporate into their business cultures, but which organisations in protected environments are less likely to be aware of at their time of transition. Competitor analysis can be a useful tool to help organisations to focus increasingly scarce resources on areas of operation that are likely to produce the best results, whilst protecting its most important asset, namely its customers against the onslaughts from competitors.

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