

# Proposing a competitive intelligence (CI) framework for Public Service departments to enhance service delivery

**Author:**

Nisha Sewdass<sup>1</sup>

**Affiliation:**

<sup>1</sup>Department of Information Science, University of Pretoria, South Africa

**Correspondence to:**

Nisha Sewdass

**Email:**

nisha.sewdass@up.ac.za

**Postal address:**

Private Bag X20, Hatfield, Pretoria 0028, South Africa

**Dates:**

Received: 26 July 2011

Accepted: 02 May 2012

Published: 05 July 2012

**How to cite this article:**

Sewdass, N., 2012, 'Proposing a competitive intelligence (CI) framework for Public Service departments to enhance service delivery', *SA Journal of Information Management* 14(1), Art. #491, 13 pages. <http://dx.doi.org/10.4102/sajim.v14i1.491>

© 2012. The Authors.

Licensee: AOSIS

OpenJournals. This work is licensed under the Creative Commons Attribution License.

**Background:** The aim of public service departments in South Africa is to improve service delivery through the transformation and improvement of human resources and the improvement of service delivery practices. Furthermore, it is important for the public service sector in South Africa to improve the quality of its service delivery, not only by comparing its performance with other sectors within South Africa but also by positioning itself amongst the best in the world. This can be achieved by benchmarking with other global industries and by implementing the most recent competitive intelligence strategies, tools and techniques. The environment of the public service organisations consists of competitive forces that impact the functioning of these organisations.

**Objectives:** This article focuses on proposing competitive intelligence-related strategies, tools and techniques for gathering and analysing information in the public service departments in South Africa in order to enhance service delivery.

**Method:** The study was qualitative in nature and was divided into two components, namely, (1) theoretical – through an extensive review of the literature and (2) empirical – an ethnographic study at the chosen public service department, the Department of Home Affairs (DHA). Ethnographic interviews with management-level staff, focus groups and document analysis were used to obtain adequate information to determine the current state of public service delivery in South Africa.

**Results:** The results of the study was the development of a new competitive intelligence-related framework for gathering and analysing information, and it represents a formal and systematic process of informing managers in public service departments about critical issues that these departments face or are likely to experience in future.

**Conclusion:** The strategic planning tools and techniques of this framework will fill the gap that exists in public service departments. Once this framework has been implemented, it could assist these departments to improve service delivery to its citizens.

## Introduction

The aim of public service departments in most countries is to lead the modernisation of the public service by assisting government departments to implement their management policies, systems and structural solutions within a generally applicable framework of norms and standards in order to improve service delivery (National Treasury 2004). Furthermore, public service departments exist to serve the needs of the citizens of the country, and all citizens have the right to expect high-quality public services that meet their needs. The aim of public service departments in South Africa is to improve service delivery through the transformation and improvement of human resources and the improvement of service-delivery practices.

Public service organisations need to perform types of strategic planning activities similar to their private-sector counterparts. These activities include environmental analysis, resource analysis, goal formulation, strategy formulation and organisational or systems design. For the organisations to accomplish these activities, they require a vast amount of internal and external data, and this data have to be analysed in terms of its objectiveness and quality. This task is best carried out by the competitive intelligence (CI) function (Wagner 2003:70).

It is important for the public service sector in South Africa to improve the quality of its service delivery, not only by comparing its performance with other sectors within South Africa but also by positioning itself amongst the best in the world. This can be achieved by benchmarking with other global industries and by implementing the most recent CI strategies, tools and techniques.

Lenz and Engledow (1986:329) suggest that the 'essential character of organisational environments may be changing in ways that require new modes of thought and analysis'. The authors further indicate that mounting pressure is placed on senior-level managers and corporate staff in

organisations to develop better methods for assessing the organisations' environments. Various models for environmental analysis that could assist organisations in strategic decision making have been identified and could be used by all types of organisations. It further relates to the environment of the organisation which consists of competitive forces that impact on the functioning of the organisation.

In light of the above, this article focuses on a proposed CI framework for gathering and analysing information in the public service departments in South Africa in order to enhance service delivery.

## Background to the study

In South Africa, the public service departments have undergone significant changes in order to rectify the injustices of the past. These changes have meant that several processes which have rationalised functions, structures, legislation and resources have been adopted. Despite much progress, it is noticed that government does not have sufficient capacity to deliver and sustain a quality service to its citizens (Khumalo 2003:20–24). Many weaknesses exist within service departments and the customers very rarely, if at all, experience the 'Wow Effect' after visiting these departments for service. The public service departments are the sole suppliers or providers of certain products or services that the citizens need. They have no direct competition, and they usually do not close down, nor do they depend on the customer for their survival. As a result, one sees little emphasis on improving customer relations or service delivery. Even when service-delivery initiatives are implemented in these departments, they usually fail to show any benefit since there is no motivation to change the way things are done. This means that the customer is left with poor service and very little bargaining power for better or more effective service from these departments.

Public service organisations are structured and operate quite differently from private-sector organisations. The key difference, with respect to CI implementation, is the lack of profit motivation in the public sector. Public Services are structured to be bureaucracies with a budget that is drawn down to provide a specific service. Management incentives and rewards tend to be related more to budget management and budget size than to organisational effectiveness (Wagner 2003:71).

The public services are characterised by the intangibility of services and the existence of multiple service objectives. The consumer, or user, has little influence on the organisation because the organisation is often a local monopoly and user payments are not a primary source of funds. These organisations sometimes fail to analyse their competitive position in terms of funds, staff, other resources and even users. This is largely because they do not utilise the basic concepts of strategic management. Often they are unable to plan strategically because they lack a clear definition of the

service organisation's mission and goals (Greenberg 1982:81). This provides more of a motivation for the public services to implement the techniques practiced by businesses such as CI.

Because a study of this nature has not been done in public service departments and because of the fact that very little has been written about CI in public service or non-profit organisations, the results from this study should fill the gaps that exist in this area not only in South Africa but globally.

The Department of Home Affairs is one of the largest public service departments, and it was selected as it is the one public service departments that every citizen is reliant upon, from 'birth to death'. They hold a monopoly over the services that they offer, and citizens are compelled by law to utilise these services in order to ensure that proper public administration is practiced in the country. The results obtained from this study, however, will be applicable in all public service departments in South Africa.

## The statement of the problem

This article forms part of a larger study that focused on ascertaining how competitive intelligence tools and techniques could be implemented in public service departments in South Africa to enhance the delivery of services. For the purpose of this paper, the focus will be on one of the aims of the study, namely, designing a CI-related framework for gathering and analysing information that can be used in all public service departments in South Africa to improve service delivery.

## Related literature

Since CI is a relatively new management concept, it is necessary to ensure that an accurate understanding and definition of CI is obtained. Several terms such as Business Intelligence, Competitor Intelligence and even Industrial Espionage are found in literature to express the concept of CI. The basis of CI is knowing the difference between information and intelligence. Executives usually have to read through several reports and proposals before making decisions, and it is often found that they are overwhelmed with information and lack intelligence that will enable them to make more efficient decisions. Therefore, it can be said that companies that are able to turn information into intelligence will succeed.

A comprehensive definition of CI is 'the legal collection and analysis of information regarding the capabilities, vulnerabilities, and intentions of business competitors conducted by using "open sources" and ethical inquiry;' (SCIP 2008).

Kahaner (1997:12–14) eloquently discusses what the new world of CI is by showing how companies efficiently, systematically and economically collect information; then they analyse and use it to make decisions. This understanding

can assist the decision makers in the public sector in making more informed decisions concerning the improvement of the quality of services offered to citizens.

CI is about differentiating between catching up and breaking out of an industry and then positioning oneself beyond best practices to invent new practices. It is about understanding the difference between 'getting better' and 'getting different' and then learning how to get different in ways that will stun and thrill customers. It is towards this that the Public Services in South Africa should strive. Hamel (2000) discussed these issues as well as the challenges that many companies, such as the Public Services, face in reinventing themselves not just in times of crisis but continually. He also provides an understanding of how companies can continue to grow and thrive in ever-changing turbulent times such as the situation in South Africa at present.

It is important for managers to understand the landscape within which the service sector finds itself. This will allow them to be better able to realise the contribution that they can make within this competitive landscape and to realise how they can benefit from a variety of strategic and tactical actions that are well suited for the service sector (Rodie & Martin 2001:19). Furthermore, such an understanding would provide managers with the reasons why the service sector should adopt an entrepreneurial attitude to improve its performance. This attitude is essential in order to provide sufficient background for commitment to the CI process in this sector.

Public service departments and other non-profit-making organisations also go through strategic planning processes regularly, just as their profit-making counterparts do. To improve the efficacy of the strategic planning process, the CI process can assist in collecting the necessary information to support decisions (Horne & Parks 2004:36). Whilst it must be acknowledged that CI alone is not the answer, it can and does provide external background and fundamental perspectives that can complement the traditional inward focus that Public Services usually have. This, then, can become a valuable tool for enhancing the quality of services delivered.

Competitive Intelligence (CI) has become increasingly important for organisations in the private sector, or profit-making organisations, because the level and intensity of competition has increased in recent years. CI helps organisations in the business environment to understand and respond to their competitors and the competitive environment (Horne & Parks 2004:33). This increase in the level and intensity of competition has also affected the public sector or non-profit-making organisations such as public service departments.

Whilst it can be argued that CI is of limited value or importance to public-sector organisations since there is a lack of profit motivation in this sector, and the functioning and structure of these organisations differ from the private-sector organisations to which CI principles are usually

applied, it is believed that public sector organisations are becoming more like traditional profit-making organisations. Given the current economic environment within which these organisations function, the increased scrutiny in the operations of these organisations, the increased level of accountability placed on them and the new and improved service delivery options that are now available to these organisations, it is suggested that CI can benefit these organisations on a similar level as it does private-sector organisations (Horne & Parks 2004:36).

CI has the ability to justify its existence in profit-making organisations with regard to profit margins:

It can improve the organisation's short term profits by improving the quality of tactical decisions and can increase its long term value by guiding management to make superior strategic decisions that increase shareholder value. (Wagner 2003:70)

This author further points out that CI fits within the operations of public-sector organisations only if it maximises value for the organisation's stakeholders. This refers to improving the quality of life of the general public or specific targeted demographic groups.

## Research methodology

This study was qualitative in nature and was divided into two components:

- theoretical – through an extensive review of the literature
- empirical – the ethnographic study conducted at the chosen public service department, namely the Department of Home Affairs (DHA).

A comprehensive literature review or document analysis was conducted to identify the current state of service delivery in public services departments in South Africa, particularly in the Department of Home Affairs. The literature review also assisted the researcher in providing a better understanding of Competitive Intelligence, its functioning and its benefits for organisations in general and, more specifically, for its applicability in public service departments.

Ethnographic interviews with management-level staff, focus groups and document analysis were also used to obtain adequate information to determine the current state of public service delivery in South Africa. These tools have ensured that scientific methods have been followed and that the results obtained from the study will have meaning and value.

CI tools that were developed in a previous study by Clarke (2001:230–235) were then adapted for their usefulness in the Public Service. Whilst these CI tools are useful in business environments, the researcher adapted them for use in this instance. Benchmarking was used for this purpose to determine the best practices and tools used for CI in other service-providing organisations. This helped the researcher to select the most appropriate tools that can be used in the public service departments to improve the delivery of services. In the final stage of the study, a new CI-related

framework for gathering and analysing information that can enhance the quality of service delivery was developed by theoretical and strategic means.

It is the assumption of the researcher that, if this framework is implemented, it could assist the departments to improve service delivery to its citizens.

It was essential to firstly identify the various form of competition that public service departments encounter before an appropriate CI framework could be designed to address these forms of competition.

## Competitive realities at the Department of Home Affairs

Diversity of competition is most prominent in the Service Sector organisations such as the Department of Home Affairs (DHA), and the competition can be 'anything and everything' that will turn the customer away from an organisation's services (Sawyer 2002:7).

Table 1 provides a summary of the competitive realities identified from the findings of the empirical study at the DHA, and it also indicates some of the phenomena uncovered in each of these forms of competition. These are also indicated within the broader themes which determined the empirical study at the DHA. These themes can also be regarded as the forms of competition that the DHA experiences.

Greenberg (1982:86) suggests that, 'once an organisation has considered the various areas in which it competes for resources and users and identifies its competitors, it must decide on its strategy'. Furthermore, when resources are limited and scarce in the environment, the organisation with the most effective competitive strategies usually survives. This makes essential the identification of the most appropriate tools and techniques so that it can afford the DHA a competitive advantage.

## Competitive Intelligence (CI) tools and techniques for the Department of Home Affairs

The present global environment is confronted with constant change and development as a result of technological innovations and new business developments. Access to information is also increasing, leading to information overload in certain instances. This means that it is increasingly necessary for organisations (and individuals) to have the tools, strategies, techniques and models as well as the skills needed to manage this vast amount of information. Tools for gathering, sorting and analysing information so that it can be converted into actionable intelligence are required to assist CI practitioners in accomplishing their tasks. It is also important to note that, whilst several tools, techniques, and strategies are identified in the literature (Fleisher & Bensoussan 2003; Gieskes 2001:76–79; Marceau & Sawka 2001:160–163; Sandman 2000:69–95), each organisation has to select appropriate tools, techniques and strategies to suit

**TABLE 1:** Summary of competitive realities at the Department of Home Affairs (DHA).

Competition	Phenomenon identified at the DHA
Strategy (Vision, mission, strategic intent)	<ul style="list-style-type: none"> <li>No common vision embraced by all staff</li> <li>No clear understanding of vision and mission statements</li> <li>Broad mission statement</li> <li>No commitment &amp; personal effort from workforce to achieve strategic intent</li> </ul>
Structure (Job redesign, restructuring, flow of information)	<ul style="list-style-type: none"> <li>Bureaucratic hierarchical structure</li> <li>Structures increases number of reporting levels</li> <li>Span of control deviates between departments</li> <li>Fragmented flow of information</li> </ul>
Business processes (Service-delivery activities)	<ul style="list-style-type: none"> <li>Civic services – core activity for the DHA</li> <li>Immigration services</li> <li>Support services</li> <li>Poor or lack of financial services and proper financial analysis</li> </ul>
Language and communication codes	<ul style="list-style-type: none"> <li>Doubtful communication channels</li> <li>Poor interpersonal communication of managers</li> <li>Job-related information not communicated to staff</li> <li>Classification of documents not suitable for sharing and use by all staff</li> <li>Grapevine ignored as communication tool</li> </ul>
Internal policies and procedures	<ul style="list-style-type: none"> <li>Some policies are out-dated and no longer relevant</li> <li>Lack of policies for many areas</li> <li>Limited input from individuals in policy formulation</li> </ul>
Organisational culture	<ul style="list-style-type: none"> <li>Weak and unhealthy organisational culture</li> <li>Lack of sustained organisational culture</li> <li>No dominant corporate culture visible</li> <li>'Hoarding culture' – no sharing and trust amongst staff</li> </ul>
Interaction patterns	<ul style="list-style-type: none"> <li>Socialising between departments non-existent</li> <li>Silo functioning of departments – no interaction</li> <li>Lack of skills transfer due to poor interaction</li> <li>Lateral interaction between managers</li> <li>Large quantities of documents, reports, et cetra not utilised by staff – no sharing of information resources</li> </ul>
Turnaround programmes	<ul style="list-style-type: none"> <li>Too many turnaround programmes</li> <li>No benefits from previous turnaround programmes</li> <li>New initiatives identified by turnaround programme</li> <li>'Quick wins' identified and attended to</li> </ul>
Left field competition	<ul style="list-style-type: none"> <li>Sudden changes in demand from DHA</li> <li>Labour costs for use of consultants</li> <li>Scarce-skills competition</li> <li>Competition from third-party service providers</li> <li>World economic and financial fluctuations</li> <li>Identity theft</li> <li>Repositioning the image of the DHA</li> </ul>

their unique environment and needs. In certain instances, a range of CI tools may be used in an organisation to ensure that information (intelligence) reaches the users in a form that they can assimilate easily and quickly.

Fleisher & Bensoussan (2003:xviii, 12, 20) state that the analysis of collected information requires creativity and technical knowledge, intuition, models and frameworks. They have discussed over four dozen techniques, tools and frameworks that organisations can utilise in order to obtain the CI that is needed. However, the authors have cautioned against the use of these formal methods as a means of taking 'superficial shortcuts' to management decision making. They also indicate that, whilst these techniques are available and have been used by organisations for many years, there is no one right analytical tool that can solve the problems of every organisation.

The complexity and depth of the analysis and, subsequently, the tools and techniques that will be chosen are dependent on the business situation and the needs of the organisation.

Furthermore, no method will by itself be able to provide all the answers that decision makers need to improve their competitiveness. Therefore, it is advised that appropriate methods be chosen for use in specific situations, and a combination of methods may be more beneficial to obtain optimal results. CI practitioners should guard against repeatedly choosing the same method and tools that they are familiar with. Apart from compromising the quality of the outcome, it can also give the competitor an idea of the organisation's strategic plans especially if they are aware of the techniques or tools on which the organisation consistently relies.

It should also be noted that many tools, techniques and models applicable for CI use are actually the traditional business or managerial tools, techniques and models that have been used in organisations for strategic planning and management decision making. They are based on solid research that has been conducted and are usually backed up by theory but on their own may not be adequate for CI purposes. However, they are flexible enough and with slight modifications and adjustments, creativity and innovative thinking, they can be used successfully in CI activities.

Specific tools and techniques are chosen depending upon various factors such as CI needs, time constraints, financial constraints, staffing limitations, data availability and relative priorities of data (McGonagle & Vella 1993).

The CI tools and techniques all have certain strengths and weaknesses, and it is essential for the managers to be aware of these aspects before using the tools and techniques. This will help them to determine the quality of the intelligence that is obtained. It will also assist them to choose the right combination of tools and techniques to use so that useful intelligence is gained as opposed to using all the tools and techniques that have more limitations than benefits and may not adequately address the needs of the user.

In order to assess the adequacy of CI analysis tools and techniques, Fleisher & Bensoussan (2007:80) developed a unique concept for analysis known as the FAROUT approach. This approach can be used as a guide for the manager to determine which tools and techniques are appropriate for a specific situation. The FAROUT approach is 'based on the premise that for analytical output to be insightful, intelligent, and valuable to business decision makers, it needs to meet a number of common characteristics' (Fleisher & Bensoussan 2007:80). A profile of the strengths and weakness of each tool and technique is also provided that can assist the manager to make an informed choice out of the myriad of tools and techniques that are available.

A 5-point scale is also used to rate the tools and techniques. An assessment of analysis techniques using the FAROUT scheme is indicated in Table 2. By using this means of selecting and using the tools and techniques, the managers

can rest assured that the quality of the output will be high and that they will be in a position to make decisions with confidence.

CI is regarded as a tool for decision makers, and in order to support the decision-making process, CI tools and techniques are used to transform the complex data and information into simplified, meaningful intelligence. This usually involves analysis of the data, where tools and techniques of analysis are used. As already established in the ethnographic study (Table 1), the DHA possesses a large quantity of documents, reports and project material that hold very valuable information, but they lack the ability to analyse the information and use it to make informed decisions. Hence, the tools and techniques that are chosen for the DHA can be regarded as CI analysis tools.

## Competitive Intelligence (CI) framework for gathering and analysing information at the Department of Home Affairs

Whilst several tools and techniques are available for managers to use, it is important to note that no single tool or technique is able to address the complex situations at the Department of Home Affairs (DHA). Furthermore, some tools and techniques can be used in several situations for a more integrated and linked view of issues. Hence a combination of tools and techniques has been decided upon for the DHA. The CI framework for gathering and analysing information at the DHA is reflected in Figure 1, and it represents a formal and systematic means for informing managers about critical issues that the DHA faces or is likely to experience in future.

**TABLE 2:** FAROUT elements and assessment scheme.

Element	Rating	5-point rating scale
Future orientation	1	Model's output is not future-oriented. It may be too anchored in the past or present
	5	Model is highly future-focussed
Accuracy	1	The level of accuracy for outputs using this model is low
	5	The requirements of the model leads to the generation of highly accurate outputs
Resource-efficiency	1	Model requires a large volume of data and financial and human resources, and it is low in efficacy
	5	Techniques are highly efficient in their use of resources and in deriving desired outputs from new inputs
Objectivity	1	Specific tool provides a low level of objectivity due to the presence of biases and mind-sets in its application
	5	Potential for bias can be minimised
Usefulness	1	Application of a tool delivers less useful output and requires additional work by or on behalf of a decision maker
	5	Tool provides a high level of valued output without requiring additional effort by the decision maker
Timeliness	1	Tool requires a great deal of time to complete well
	5	Tool takes little time to successfully complete

Source: Adapted from Fleisher, C.S. & Bensoussan, B.E., 2007, *Business and competitive analysis: effective applications of new and classic methods*, FT Press, Upper Saddle River.

Three levels have been chosen for the framework, and each level focuses on an important form of analysis that can be beneficial for decision making mainly at the different levels in an organisation. These levels can be identified as:

- **Strategic level:** The first level represents analysis of information that can assist the DHA at the strategic decision-making level. This level also provides a framework within which other levels (tactical & operational levels) of intelligence collection and analysis take place, and it assists the organisation in identifying important trends and patterns that emerge in its environment as well as the threats and opportunities available to the organisation (Fleisher & Bensoussan 2007:27). In the framework, Figure 1, this level is represented as the environmental analysis.
- **Tactical level:** Level two represents the analysis of information that can assist mainly in tactical decision making at the organisation, and it also supports the strategic level. According to Fleisher & Bensoussan (2007:27), a symbiotic relationship exists between the strategic and tactical levels of intelligence analysis. This level is represented by the service-business analysis, evolutionary analysis and financial analysis in Figure 1.
- **Operational level:** The third level of the framework represents the operational level of information analysis, and it focuses on the actual delivery of services to the customers at the DHA. The tools used here are mainly to identify customers' needs, behaviour analysis and the forms of competition that affect the provision of services to the customer. This level is, therefore, represented as customer analysis and competition analysis in Figure 1.

Whilst several tools and techniques are available for organisations to use at each of the levels, it should be noted that these tools and techniques were not originally designed with service-sector organisations in mind. However, some of these tools and techniques can still be adapted and used successfully to address the problems that the DHA experiences and these have been selected from the array of tools and represented in the framework. After identifying the various forms of competition at the DHA, care was taken to identify only those tools and techniques that would be able to assist the DHA to outsmart these forms of competition in order to enhance its service delivery.

The tools for the framework have been divided into several elements in order to inform managers of their focus in each category and to make it easy for the model to be used in any other service sector. Furthermore, the elements of the framework are sequential in nature, commencing with a broad *environmental analysis* of the environment in which the DHA operates. The focus then moves to a *service-business analysis* where the DHA is analysed in relation to its operating environment.

At this level, two elements of serious concern to the DHA have been identified separately, and they should be analysed concurrently with the service business to benefit the organisations' overall operations. These elements are the *financial analysis* and the *evolutionary analysis*.

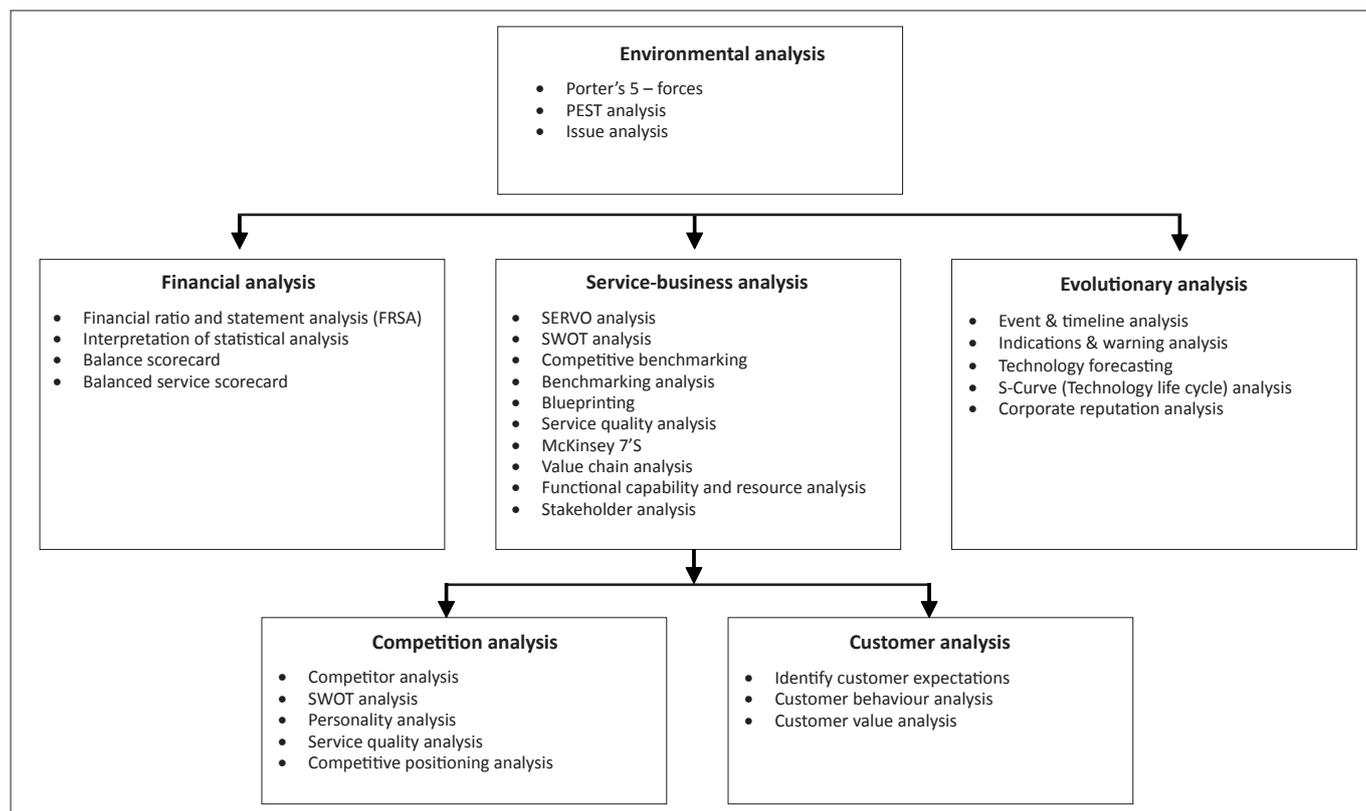
The financial analysis is non-existent, and the DHA's financial situation is in dire straits (Table 1). The evolutionary analysis focuses mainly on the left field competition. The separation of these two elements from the rest of the service-business analysis serves to highlight the level of importance and priority of these analyses for the DHA. In the context of a public service organisation, financial analysis requires a keen accounting of the resources used and investments made. It also needs to look at the efficiency and effectiveness by which financial resources are being utilised. Unlike a Private Sector organisation, which has the benefit of GAAP (generally accepted accounting principles), financial ratio and statement analysis (FRSA), a Public Sector service context is more akin to the work done by management accountants who attempt to make internal and time-based comparisons of the efficiency and effectiveness of financial resources.

Once the DHA has a better understanding of its position and operations in its industry, that is the public service sector, it is essential for it to analyse both its *competition* and its *customers* before it can develop and implement strategic decisions for the organisation. Once again the competition and customers are the most crucial elements of any service organisation, and the DHA exists to provide a service to customers. The fact that the organisation has dedicated so little attention to these elements warrants them being part of the framework as it is believed that, if these elements are not sufficiently addressed at the decision-making stage, service delivery will not be improved (Fogli 2006; Parasuraman, Zeithaml & Berry 1994). The first element to be investigated here is the environmental analysis.

## Environmental analysis

The DHA has to understand the environment, or market, in which it operates if it intends to position itself for success within that environment. Several groups and organisations in the external environment in which the DHA works will have to be monitored, either directly or indirectly, for changes in their needs, perceptions and preferences. Furthermore, trends and changes in regulatory and political authorities need to be monitored and analysed as these influence the operations of the DHA. Any form of competition from its funding authorities and its customers should also be monitored and analysed.

Milliken (1987:135) indicated that there are different types of uncertainty about the environment that organisations experience when they try to make sense of and respond to conditions in the external environment. This uncertainty about the environment can be as a result of the individual's lack of understanding of how the components of the environment might be changing or the inter-relationships that exist between these components in the environment. This uncertainty about the environment could lead to poor strategic planning and resource allocation. Hence environmental analysis is essential to provide this form of understanding for decision makers in an organisation.



Source: Adapted from Clarke, D.E., 2001, 'Competitive intelligence in service industries', in C.S. Fleisher & D.L. Blenkhorn (eds.), *Managing frontiers in competitive intelligence*, pp. 223–237, Quorum Books, Westport, Connecticut.

**FIGURE 1:** Competitive Intelligence (CI) framework for gathering and analysing information at the Department of Home Affairs (DHA).

As stated by Clarke (2001:232), the competitive analysis should be able to identify which resources are scarce and what untapped opportunities exist, as this is where sustainable competitive advantages can be created. Hence the tools identified to assist the DHA for these purposes are *PEST analysis*, *Porter's 5-forces model* and *Issue analysis*. The PEST analysis focuses on the political, economic, social and technological climate of the DHA. Porter's 5-forces model can be used together with the PEST analysis for a more comprehensive understanding of the environment and the relationships and dynamics that exist in its market environment. Whilst it may be argued that Porter's 5-forces model was designed mainly to assist the profit-seeking industries where the delivery of products to customers is important, the researcher believes that this model can also assist service-sector organisations such as the DHA. The DHA functions within the broader environment: Suppliers of specific products, resources and services come from this environment, and they are usually the same suppliers as for the profit-making industries. The end-product of DHA may be intangible (services), but the delivery of these services is reliant on several other aspects in order for it to be effective and efficient. Hence, using Porter's 5-forces analysis will provide the DHA with a better understanding of its industry environment.

Issue analysis can assist the DHA to become more aware of the changes in its environment and to be proactive, participating in policy developments that impact on its

operations. The lack of sound policies and procedures that have been identified at the DHA (Table 1) can be addressed by this analysis.

In addition, these tools and techniques can assist the DHA to understand its environment better and, in doing so, align its strategic objective and planning with that of its industry environment. Once a thorough understanding of the environment in which DHA operates has been established, it will have to analyse its own service-business environment.

### Service-business analysis

According to Sandman (2000:78), it is not possible for an organisation to understand its competitors unless it first understands its own organisation and its service business. Furthermore, this form of analysis will focus on the organisation's internal environment and identify those forces that operate inside the organisation with specific implications for managing organisational performance (Fleisher & Bensoussan 2003:275). The organisation will also be in a position to ascertain its degree of fit between the service organisation and its competitive environment by making use of tools such as the *SERVO analysis*. Beyond this, the DHA needs to examine its internal strengths, weaknesses, opportunities and threats, and this can be identified by a *SWOT analysis*. However, this cannot be done in isolation and will therefore require input through *benchmarking* with other service organisations within the government, private sector and even with other organisations that offer

the same or similar services, although it may be in very different environments. Such an organisation would be the Home Office in the UK, whose operations and mandate is the same as that of the DHA. *Competitive benchmarking* helps to analyse the performance of the DHA against the best-in-class, and the DHA will be able to set targets to exceed the performance of the competition and to pay attention to the skills and competencies that will be required to do this.

Whilst benchmarking is an outward focus, *blueprinting* has more of an inward focus that can assist the DHA to communicate the details of its services from beginning to end (Clarke 2001:234). This can be useful for DHA managers and staff as it will help to identify service gaps that can be detrimental to the operations of the organisation's performance. It is further essential to analyse the quality of services offered, and the *service quality analysis* is useful for service-providing organisations such as the DHA. This analysis will provide useful information to decide whether the DHA is providing the quality of service that meets the expectations of its customers.

Having already identified the changes that the DHA is undergoing as a result of the Turnaround Programme (Table 1) and the forms of competition experienced as a result, the *McKinsey 7 S analysis* has been included in the framework to facilitate the process of strategy implementation within this context. The McKinsey 7 S model will allow the DHA to realise the interrelationships that are necessary between structure, strategy, systems, style, staff, skills and shared values within the DHA, and it will assist in the design and restructure of the organisation. It will also assist in determining how the organisational design of the DHA will impact on service delivery and whether the systems and processes in place will be able to support the strategic needs of the organisation.

The *value chain analysis* can also assist the DHA in its organisational design as it can provide valuable insight about the activities that add the greatest value to the organisation and need to be controlled and protected. It also assists in identifying the activities that add no value and need to be discontinued. There will also be activities that add little value, and concerning these, consideration is needed as to whether they should be made more efficient, be outsourced or stopped completely (Sandman 2000:93). Value chain analysis can identify core competencies that are required by the DHA to achieve its desired results.

Once these core competencies have been identified, *functional capability and resource analysis* can be used by the management of the DHA to analyse its internal tangible and intangible assets, along with its core capabilities, to determine whether these assets are valuable resources that are capable of providing the organisation with a competitive advantage. This resource-based view to sustained competitive advantage is also confirmed by Barney (1991:99). He states that organisations' resources have the potential to generate competitive advantage for the organisation. Organisations and managers should therefore obtain a

better understanding of how resources can impact the long-term success of the organisation, and this should be taken into consideration during the strategic planning initiatives of the organisation.

Wagner (2003:77) states that, 'because of the nature of public organisations, it is important to consider the opinions of all key stakeholders, or "publics", when evaluating the distinctiveness of resources'. In addition, public organisations with strong cultures can easily lose sight of public opinion and rely too heavily on internal, often biased, opinions. Therefore, *stakeholder analysis* is an important tool for the DHA. It can provide insight into those stakeholders who are valuable to the DHA and assist management to allocate resources appropriately to manage its stakeholders. It can also be used to motivate for additional funds to service the needs of these stakeholders.

### Financial analysis

The first financial analysis tool is the *financial ratio and statement analysis (FRSA)* which provides managers with an understanding of the organisation's competitive performance. Ratios are used to assess the current performance, examine business trends, evaluate business strategies and monitor progress (Fleisher & Bensoussan 2003:400).

These authors further indicate that FRSA is an extremely helpful information overload tool as it can transform large quantities of disjointed financial data into manageable and meaningful outputs, and it connects the several pieces of financial data into one integrated analysis. DHA will find this tool useful as it does not have a system that integrates all its financial data.

Another financial tool that can be useful is the *interpretation of statistical analysis* which enables a simple description of complex situations and can provide predictive insights (Fleisher & Bensoussan 2007:417). This tool provides systematic and objective methods for examining financial and other forms of research data and for obtaining valuable information from an organisation's operations and activities. This is vital for the DHA which operates in a highly political environment where each manager tries to obtain the largest share of the resources, based on their political affiliation rather than actual performance. Decision making can also be supplemented by objective statistical data which can then be used to motivate for additional funding and resources.

Whilst these tools for financial analysis can be beneficial for the DHA, it should be noted that these tools will require the skills and competencies of financial accountants and managers. Since the DHA does not, currently, have these skills and competencies available internally, it will have to seek the services of outside financial consultants and management accounts until staff with these competencies and skills have been acquired.

The *balanced scorecard* uses performance measures to track and adjust business strategy. Together with the financial

perspective, the balanced scorecard forces managers to incorporate the customer perspective, operations and the organisation's innovation and learning ability (Have, Have & Stevens 2003:12). It makes it possible to ascertain financial consequences of non-financial measures that can impact the long-term financial success of the organisation. With the lack of skilled and competent staff to conduct a financial analysis at the DHA, this tool will be valuable as it does not require extensive financial knowledge, although it does produce data that can be used for financial assessment. Furthermore, the balanced scorecard encourages the establishment of tangible objectives and measures that are linked to the mission, vision and strategy of the organisation. The problems relating to the vision, mission and strategy of DHA can be addressed with this tool.

A modification to the balanced scorecard is a *balanced service scorecard* which 'helps to identify opportunities to increase value realisation and predicting the expected performance in the future with some confidence' (Tyagi & Gupta 2008). The service scorecard can also assist the DHA in its organisational structuring as it makes the organisational structure more visible and acceptable to all employees in the organisation. Top-level leadership is responsible for the implementation of service scorecards, and this leadership is critical for the organisation to achieve its objectives as it inspires employees to excel and improve their performance. This tool will therefore be useful to the DHA to encourage strong leadership and improved performance of its staff, especially at the level of senior management.

This leads to another service-level analysis that was identified as valuable for the DHA: evolutionary analysis.

### Evolutionary analysis

As a result of the fundamental changes, redesign, restructuring and turbulence that the DHA has gone through with its previous Turnaround Programmes and the present Turnaround Programme, tools for evolutionary analysis were deemed necessary to assist management to react appropriately and to make difficult decisions that arise amidst these situations. These tools will also prepare the DHA to react to the left field competition that it encounters.

The first evolutionary tool suggested is therefore the *event and timeline analysis* which is a group of related techniques that display events sequentially in a visual manner. When conducted systematically, it can uncover important trends about the organisation's competitive environment and serve an early-warning function (Fleisher & Bensoussan 2007:343). These authors suggest that this tool is best used when an organisation is dealing with a large number of discrete events that transpire over a long period of time or are otherwise obscured.

Another tool that can serve as an early-warning sign for decision makers is the *indications and warning analysis*. This tool can assist in reducing the element of surprise, uncertainty

and risk, and it alerts managers well in advance of a situation arising, thereby allowing them to take the necessary action to counteract the impact of the situation. This tool can assist the DHA to address the sudden changes in demand. This tool will also afford the DHA the opportunity to become proactive in its decision making and enhance its innovative capacity.

The culture of innovation and frequent changes in technology has challenged DHA to keep up with these developments in all its operations and activities. The lack of internal IT capacity in the DHA also means that the existing technology is not used optimally and has not been upgraded to meet the changes in its operations. Hence *the technology forecasting and S-Curve (technology life cycle) analysis* has been included in the framework as these tools can provide information about the changes and development in technology. It will also assist the DHA in recognising the limits of its existing technology and in making decisions about what new technology to acquire that may assist in transforming and enhancing its processes, operations, resource allocation and budgeting, communication and flow of information within the organisation. This tool can assist in creating a positive image and in positioning the DHA in a more favourable manner. Whilst these tools are created by organisations to deal with their specific requirements, the DHA can still utilise these tools on condition that they have been created by other organisations who are dealing with similar technological contexts. This can be done either by purchasing, outsourcing or borrowing and adapting the model to suit its own specific needs.

*Corporate reputation analysis* will be another useful tool for the DHA as it will be able to identify the organisation's image amongst its key stakeholders and enable managers to improve its relations with its stakeholders in future (Fleisher & Bensoussan 2007:275). Having knowledge of its reputation and image is also important for the DHA as this can impact on its funding, support from its customers and employees. It can also assist the DHA in repositioning its already tainted image as identified in Table 1. Another way for the DHA to determine the exact nature of its reputation and image would be to conduct an analysis of its customers. Use of this tool also allows the DHA to compare itself with other public service agencies, some of which will compete with it for talented staff, for resources from the political centre and/or for time in the positive media spotlight.

### Customer analysis

DHA has an important goal of ensuring that it delivers quality services to its customers. Hence, it needs to understand and *identify the customers' expectations* of the services that it offers in order to make sure that it delivers according to these expectations. Furthermore, *customer behaviour analysis* would assist the DHA to create a profile of its customers' behaviour and then strategise to meet and exceed the desires and expectation of its customers. These tools are necessary for the DHA especially since it is experiencing problems in

this regard as noted in Table 1. Using these tools will ensure that the DHA responds to the needs of its customers and that its services are provided impartially, equitably and without bias.

Conducting a *customer value analysis* will complement the two tools already identified. Customer value analysis comprises of several tools and techniques that can assist the DHA better to understand its customers, competitors and markets (Fleisher & Bensoussan 2003:180). Understanding customer expectations can also be important for competitor analysis as the provider that can best meet the expectations of the customer will win their support.

### Competition analysis

In order to survive in the competitive environment within which the DHA is situated, *competitor analysis* is an important tool that provides a comprehensive picture of the strengths and weaknesses of current and potential competitors (Fleisher & Bensoussan 2003:144). It helps to create a profile of the competitor, and this is useful for the DHA to adopt more confident, aggressive and proactive measures to outsmart the competitors and also to help managers to identify the kinds of resources, skills and competencies that the DHA needs to remain competitive.

A tool that is closely related to competitor analysis and that reduces the threats posed by the competition is the *SWOT analysis*. This is suggested for the DHA as it can assist in developing a profile of the competitors. This tool can be used, together with the competitor analysis, to obtain an enhanced profile of the competitors.

*Personality analysis* is a tool that provides a more qualitative type of information that may help to explain how a competitor perceives itself and how it may react in a particular situation (Cook & Cook 2000:129). It also provides an understanding of the competitor's corporate culture, values and past strategies. This is important for developing strategies that will counteract the reaction of the competitor before it can impact the organisation, and it will be able to assist in strategic planning. This can also be focused internally on the DHA itself to obtain a better understanding of how decisions makers and the decision-making groups within the organisation react to certain types of contexts or situations.

*Service quality analysis* is another competitor analysis tool that may be useful for the DHA to analyse the quality of its competitors' and its own service. Having an idea of the quality of the competitors' service can assist the DHA in implementing certain measures and activities that can ensure that they exceed the quality of the competitors and thereby remain the organisation of choice for the customers. It can also contribute towards its competitive positioning in the environment.

According to Fleisher & Bensoussan (2007:103), *competitive positioning analysis* enables an organisation to make strategic

plans in relation to its current competitive position whilst also providing information about the organisations' competitors. This tool requires research and exploration in specific areas to obtain accurate information on the organisation's competitive positioning, and this process enhances the research capability of the organisation. The information is used for strategic planning and the management of the organisation, and this will benefit the DHA since it will provide useful information about the reputation and image of the organisation. Organisations with a better competitive position in the environment are likely to attract more valuable stakeholders, partners, employees and alliances, which can assist the organisation successfully to achieve its goals. The DHA needs to attract more valuable stakeholders, partners, employees and alliances as it does experience a serious problem in terms of scarcity skills and senior-management capabilities. Perhaps a positive competitive positioning will assist the DHA in attracting and retaining professional skills that are lacking.

This CI framework for gathering and analysing information will fill the gap that exists at the DHA in terms of its tools and techniques for strategic planning. It will assist the organisation in moving away from strategic planning that is merely a paper exercise based on monthly reports and 'gut feel' to a more evidence-based, factual process of strategic planning that involves thorough analysis and is based on a structured, systematic and reliable process. It will enable the DHA to identify and respond to the competitive forces that bedevil its operations and hamper service delivery. Table 3 provides a brief summary of the CI objectives of each tool and technique suggested in the CI Framework for the DHA, and this table is intended to be a quick guide to the managers and decision makers.

## Assessing the adequacy of the tools and techniques suggested for use at the Department of Home Affairs

In order to make decisions based on the intelligence gained from using the CI tools and techniques, the management team needs to be sure that the intelligence is accurate and as far as possible provides an unbiased and authoritative account of reality. They also need to feel comfortable with the tools and techniques chosen for each situation and have confidence that it will provide the intelligence that is needed for the desired outcomes of the DHA. Furthermore, management has to know that the intelligence obtained from using these tools and techniques can and will be used to add value to the organisation.

There may be some situations where more than one tool or technique or a combination of several tools and techniques may have to be used in order to obtain the desired result. The selection of these tools will depend on the managers' skills and analysis competencies. At the DHA, there is already a shortage of skilled and competent senior-management staff. Therefore, some guidance and assurance about the tools and

**TABLE 3:** Competitive Intelligence (CI) objectives of each tool and technique suggested in the Competitive Intelligence (CI) framework for the Department of Home Affairs (DHA).

CI Tool	CI Objectives
<b>Environmental analysis</b>	
Porter's 5-Forces	<ul style="list-style-type: none"> <li>Identifies strengths and competitive rivalry facing the service sector</li> <li>Determine the five fundamental competitive forces that impact the service sector</li> </ul>
PEST analysis	<ul style="list-style-type: none"> <li>Identifies the political, economic, social and technological issues affecting the service sector</li> </ul>
Issue analysis	<ul style="list-style-type: none"> <li>Enables the anticipation of changes in the external environment in order for organisations to become proactive and participate in public policy development</li> </ul>
<b>Service-business analysis</b>	
SERVO analysis	<ul style="list-style-type: none"> <li>Analyses of the DHA's management preferences, resources, strategies and capabilities, and how these elements fit with the environment</li> </ul>
SWOT analysis	<ul style="list-style-type: none"> <li>Identifies the DHA's strengths, weaknesses, opportunities and threats</li> </ul>
Competitive benchmarking Benchmarking analysis	<ul style="list-style-type: none"> <li>Identifies similar organisational processes in other industries and improve standards and processes to that of the best in the business</li> </ul>
Blueprinting	<ul style="list-style-type: none"> <li>Develops a process blueprint to identify every aspect of the DHA's operations</li> </ul>
Service quality analysis	<ul style="list-style-type: none"> <li>Analyses the quality of service provided by the DHA to its customers</li> </ul>
McKinsey 7'S	<ul style="list-style-type: none"> <li>Facilitates the process of strategy implementation within the context of organisational change that the DHA is currently undergoing</li> </ul>
Value chain analysis	<ul style="list-style-type: none"> <li>Identifies activities that add the greatest value to the DHA and need to be controlled and protected</li> <li>Identifies core competencies that are required by the DHA to accomplish its desired results</li> </ul>
Functional capability and resource analysis	<ul style="list-style-type: none"> <li>Analyses the DHA's internal tangible and intangible assets and core capabilities to determine if these assets are valuable resources that are capable of giving the organisation a competitive advantage</li> </ul>
Stakeholder analysis	<ul style="list-style-type: none"> <li>Provides insight into those stakeholders that are valuable to the DHA and assist management to allocate resources appropriately to manage its stakeholders</li> </ul>
<b>Financial analysis</b>	
Financial ratio and statement analysis (FRSA)	<ul style="list-style-type: none"> <li>Analysis tool which provides managers with an understanding of the organisation's competitive performance by means of ratios</li> </ul>
Interpretation of statistical analysis	<ul style="list-style-type: none"> <li>Systematic and objective methods for examining financial data and for obtaining valuable information from an organisation's operations and activities</li> </ul>
Balance scorecard	<ul style="list-style-type: none"> <li>Uses performance measures to track and adjust business strategy</li> </ul>
<b>Evolutionary analysis</b>	
Event & timeline analysis	<ul style="list-style-type: none"> <li>Group of related techniques that display events sequentially in a visual manner to uncover important trends about the organisation's competitive environment and serves as an early warning function</li> </ul>
Indications & warning analysis	<ul style="list-style-type: none"> <li>Analyses the elements of surprise, uncertainty and risk and alerts managers well in advance of a situation transpiring thereby allowing them to take the necessary actions to counteract the impact of the situation</li> </ul>
Technology forecasting S-Curve (Technology life cycle) analysis	<ul style="list-style-type: none"> <li>Analyses the changes and development in technology and assists the DHA to recognise the limits of its existing technology and make decisions about what new technology to acquire</li> </ul>
Corporate reputation analysis	<ul style="list-style-type: none"> <li>Identifies the organisation's image amongst its key stakeholders and enable managers to improve its relations with its stakeholders in the future</li> </ul>
<b>Customer analysis</b>	
Identify customer expectations	<ul style="list-style-type: none"> <li>Identifies customer expectations of the services that it offers in order to make sure that it delivers according to these expectations.</li> </ul>
Customer behaviour analysis	<ul style="list-style-type: none"> <li>Identifies and creates a profile of behaviour of the DHA's customers and then strategise to meet and exceed the desires and expectation of its customers</li> </ul>
Customer value analysis	<ul style="list-style-type: none"> <li>Analysis comprises of several tools and techniques that can assist the DHA better to understand its customer's, competitors and markets</li> </ul>
<b>Competition analysis</b>	
Competitor analysis	<ul style="list-style-type: none"> <li>Analyses and provides a comprehensive picture of the strengths and weaknesses of current and potential competitors</li> </ul>
SWOT analysis	<ul style="list-style-type: none"> <li>Analyses and develops a profile of the competitor and can be used together with the competitor analysis to obtain an enhanced profile of the competitor</li> </ul>
Personality analysis	<ul style="list-style-type: none"> <li>Provides qualitative information that may help to explain how a competitor perceives itself and how it may react in a particular situation</li> </ul>
Service quality analysis	<ul style="list-style-type: none"> <li>Analyses its competitors' and its own service quality</li> </ul>
Competitive positioning	<ul style="list-style-type: none"> <li>Enables an organisation to make strategic plans in relation to its current competitive position and it also provides information about the organisations' competitors</li> </ul>

Source: Authors' own data

techniques are essential as this will assist even the most doubtful and unskilled manager to make a decision about the selection of tools and techniques that are adequate for use in a specific situation or to obtain specific intelligence.

In the light of this, the FAROUT approach as discussed above was used to access the adequacy of the CI tools and techniques selected for the DHA. The output of every tool and technique that was chosen for the DHA was assessed

according to the six elements of the FAROUT approach as reflected in Table 2. The assessment scheme and the profile of the strengths and weaknesses of each tool and technique were carefully examined. This was to ensure that the tools and techniques reflected in the CI framework for gathering and analysing information at the DHA (Figure 1) are indeed useful for addressing the specific situations that the DHA needs to address through their use. In certain cases where the tool has had a low rating, another tool of a higher rating and with greater strengths was selected in order to complement the first, weaker tool. Therefore, suggestions for the selection of tools can be noticed for each element in the framework.

It is also important to note that it is not feasible for an organisation to make use of all these tools and techniques simultaneously to address its needs. Some of these tools and techniques are usually used by organisations prior to strategic planning, on an on-going basis or as-needed for specific aspects or projects at hand. Some tools are required to be used for decision making, and when major decisions need to be taken, they can prove to be very useful. However, in the case of the DHA, where it was identified in the ethnographic study that not many tools and techniques were used to assist in strategic planning, restructuring, decision making and new projects, it is suggested that the organisation make every effort to use all these tools and techniques during the next planning phase. The planning phases usually come a year ahead of the announcement of its strategic plans and objectives. These tools and techniques should be used to try to rectify the current problems and challenges that the DHA experiences in terms of its service delivery.

## Future research

The findings and the development of the CI framework for gathering and analysing information for public service departments has led to the following areas that need further investigation:

- The CI framework that has been reflected in Figure 1 needs to be tested in the DHA and other public service departments. It will be interesting to investigate what the situation will be with regard to service delivery after these tools and techniques have been implemented. This can be studied by means of longitudinal evaluative research method where pre and post-testing can be done.
- The opinions and perceptions of customers' and employees should be investigated after these tools have been implemented in the DHA to determine whether the service delivery has improved and to determine whether the CI tools have been useful for Public services departments in South Africa.
- The positive outcomes of enhanced service delivery by public service departments, such as political, technological and socio-economic advantages, should be investigated.

## Conclusion

This article focussed on CI tools and techniques that have been identified as suitable for use in the DHA in order to

improve service delivery. The discussion commenced with an overview of the competitive realities that exist at the DHA, and this provided a basis for identifying and suggesting several tools and techniques that were depicted in a CI framework for gathering and analysing information in the DHA.

The CI framework for gathering and analysing information at the DHA is reflected in Figure 1, and it represents a formal and systematic means for informing managers about critical issues that the DHA faces or is likely to experience in the future. The tools for the framework have been divided into several elements in order to inform managers of their focus in each category and to make it easy for the model to be used in any other service sector. These elements are: environmental analysis, service-business analysis, financial analysis, evolutionary analysis, customer analysis and competition analysis. This framework will fill the gap that exists at the DHA as far as its strategic planning tools and techniques are concerned.

It should be noted that not all the tools and techniques indicated in the CI framework for the DHA can be used by the organisation at once. However, a selection can be made from these tools and techniques to respond to the competitive forces that bedevil the operations and service delivery as indicated in Table 1. It is further suggested that the DHA could consider starting with the tools and techniques in the customer analysis and evolutionary analysis categories as these tools will be able to assist the department to immediately attend to the poor reputation and customer service with which it has been plagued.

Whilst it is difficult to motivate and justify the implementation of CI activities in the public service sector mainly because of the lack of an easily quantifiable outcomes measure, it was found that the Public Services have several stakeholders who are involved in the operations of the departments, and these stakeholders can view the outcomes measure from varying perspectives. This can be regarded as an ideal motivation and opportunity for CI to be implemented so that it can add value to the functioning of public service. CI activities, in this case, can ensure that appropriate, accurate and actionable intelligence is made available for the organisation to meet its challenges.

## Acknowledgements

### Competing interests

The author declares that she has no financial or personal relationship(s) which may have inappropriately influenced her in writing this paper.

## References

- Barney, J., 1991, 'Firm resources and sustained competitive advantage', *Journal of Management* 17(1), 99–120. <http://dx.doi.org/10.1177/014920639101700108>
- Clarke, D.E., 2001, 'Competitive intelligence in service industries', in C.S. Fleisher & D.L. Blenkhorn (eds.), *Managing frontiers in competitive intelligence*, pp. 223–237, Quorum Books, Westport, Connecticut.

- Cook, M. & Cook, C., 2000, *Competitive Intelligence: create an intelligent organization and compete to win*, Kogan Page, London.
- Fleisher, C.S. & Bensoussan, B.E., 2003, *Strategic and competitive analysis: methods and techniques for analyzing business competition*, Prentice Hall, Upper Saddle River.
- Fleisher, C.S. & Bensoussan, B.E., 2007, *Business and competitive analysis: effective applications of new and classic methods*, FT Press, Upper Saddle River.
- Fogli, L. (ed.), 2006, *Customer service delivery: research and best practices*, Jossey-Bass, San Francisco.
- Gieskes, H., 2001, 'Competitive Intelligence at Lexis-Nexis', in J.E. Prescott & S.H. Miller (eds.), *Proven strategies in Competitive Intelligence: lessons from the trenches*, pp. 69–82, John Wiley & Sons, New York.
- Greenberg, E., 1982, 'Competing for scarce resources', *Journal of Business Strategy* 2(3), 1–87.
- Hamel, G., 2000, *Leading the revolution*, Harvard Business School Publishing, Boston.
- Have, S.T., Have, W.T. & Stevens, F., 2003, *Key management models: the management tools and practices that will improve your business*, Financial Times Prentice Hall, London.
- Horne, M. & Parks, T., 2004, 'Implementing competitive intelligence in a non-profit environment', *Competitive Intelligence Magazine* 7(1), 33–36.
- Kahaner, L., 1997, *Competitive intelligence: how to gather, analyse, and use information to move your business to the top*, Touchstone, New York.
- Khumalo, F., 2003, 'Government strategy to enhance service delivery institutions', *Service Delivery Review* 2(1), 20–24.
- Lenz, R.T. & Engledow, J.L., 1986, 'Environmental analysis: the applicability of current theory', *Strategic Management Journal* 7, 329–346. <http://dx.doi.org/10.1002/smj.4250070404>
- McGonagle, J.J. & Vella, C.M., 1993, *Outsmarting the competition: practical approaches to finding and outsmarting the competition*, McGraw-Hill, London.
- Marceau, S. & Sawka, K., 2001, 'Developing a world-class CI program in telecoms', in J.E. Prescott & S.H. Miller (eds.), *Proven strategies in Competitive Intelligence: lessons from the trenches*, pp. 148–167, John Wiley & Sons, New York.
- Milliken, F.J., 1987, 'Three types of perceived uncertainty about the environment: state, effect, and response uncertainty', *Academy of Management Review* 12(1), 133–143.
- National Treasury, 2004, *Medium term budget policy statement*, Government Printer, Pretoria.
- Parasuramen, A., Zeithaml, V.A. & Berry, L.L., 1994, 'Alternative scales for measuring service quality: a comparative assessment based on psychometric and diagnostic criteria', *Journal of Retailing* 70(3), 201–230. [http://dx.doi.org/10.1016/0022-4359\(94\)90033-7](http://dx.doi.org/10.1016/0022-4359(94)90033-7)
- Rodie, A.R. & Martin, C.L., 2001, 'Competing in the service sector: the entrepreneurial challenge', *International Journal of Entrepreneurial Behaviour & Research* 7(1), 5–21. <http://dx.doi.org/10.1108/13552550110385718>
- Sandman, M.A., 2000, 'Analytical models and techniques', in J. Miller and the Business Intelligence Braintrust (eds.), *Millennium intelligence: understanding and conducting Competitive Intelligence in the digital age*, pp. 69–95, Cyber Age Books, Medford.
- Sawyer, D.C., 2002, *Smart services: competitive information strategies, solutions and success stories for service businesses*, Information Today, Medford.
- SCIP, 2008, *Society for Competitive Intelligence Professionals*, viewed 17 June 2008, from <http://www/scip.org>
- Tyagi, R.K. & Gupta, P., 2008, *A complete and balanced service scorecard: creating value through sustained performance improvement*, FT Press, Upper Saddle River.
- Wagner, R.B., 2003, 'Can competitive intelligence be effectively applied to public-sector organizations?', in C.S. Fleisher & D.L. Blenkhorn (eds.), *Controversies in competitive intelligence: the enduring issues*, pp. 70–82, Praeger, Westport.