

CHAPTER 3: Intelligence processes

'The purpose of systematizing the BI process is to organise the activity to efficiently produce intelligence useful for decision-making'.²

3.1 Introduction

Having defined BI in the previous chapter, it is important to identify and analyse the processes used to generate intelligence output. The purpose of the intelligence process is to produce actionable intelligence output. Miller (2000:13) explains that the intelligence process 'generates insightful recommendations regarding future events for decision makers rather than generating reports to justify past decisions. The process offers critical choices regarding future decisions that provide a desired competitive advantage'. The process of turning data, information and knowledge into intelligence output to deliver insightful recommendations and intelligence regarding future events often require a step-by-step approach. Without following the steps of an intelligence process to produce intelligence output, BI staff members run the risk of disseminating intelligence of inferior quality, which could potentially have a negative impact on business performance.

The aim of this chapter is to explain the importance of, and various stages/steps in the typical intelligence processes, some of which could be considered for application in SA banking institutions.

In this chapter, the importance of the intelligence process as a component in the BI system, a basic intelligence process and several benchmark intelligence processes are discussed. This is followed by a discussion of a number of

² Gilad and Gilad. 1988. The business intelligence system: a new tool for competitive advantage.

commercial/business derivatives of the CIA intelligence cycle. The differences between various intelligence processes, as well as specific concerns regarding these intelligence processes, are also discussed. This is followed by a brief discussion of some of the views of those scholars that challenge the validity of commonly used intelligence processes. In the next section of this chapter, a brief look will be taken at the Alpha Cycle, an intelligence process that takes cognisance of objections against the typical four/five-stage intelligence process and which could be considered for implementation in SA banking institutions.

3.2 *The importance of intelligence processes*

For the conduct of intelligence, the importance of the process by which information is turned into intelligence cannot be overemphasised. Kahaner (1998: 43) refers to this process as the basic unit of an intelligence system. In the previous chapter of this dissertation (see paragraph 2.3), the researcher argued that information and knowledge has to be subjected to a process consisting of various steps in order to generate intelligence output. Without the application of an intelligence process, intelligence output cannot be produced. It should be noted that intelligence processes are but one component of a BI system, and that intelligence processes require inputs and resources to be able to generate the required output (Also refer to paragraph 2.8).

3.3 *A basic intelligence process*

In its most basic form, and based on the definition of intelligence as discussed in Chapter 2 of this dissertation, an intelligence process could be depicted as follows:

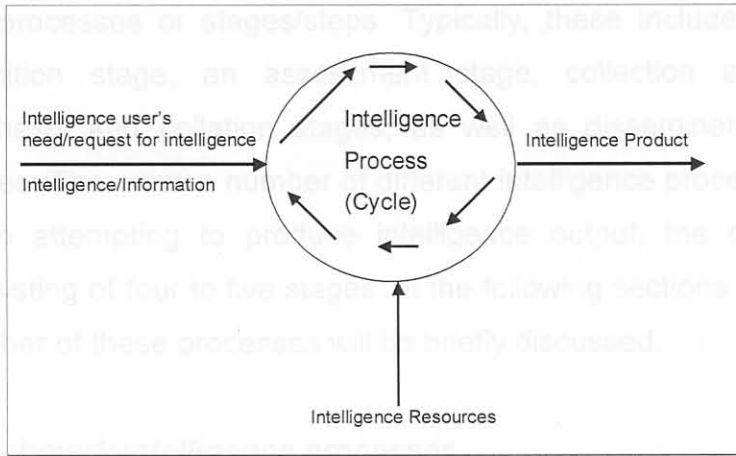


Figure 3.1: A basic intelligence process

- Input for the process.** Typically, the process is triggered by an intelligence user who needs to deal with a business issue or has to make decisions that require access to intelligence. In addition to a specific requirement for intelligence, existing data, information, knowledge and previously generated intelligence output could also act as inputs to the process. A typical example is where intelligence users are provided with intelligence products and, after having digested the contents, they identify a requirement for additional intelligence products.
- Output of the process.** Typically, intelligence outputs are referred to as intelligence products and provided to intelligence users through written or verbal communication. The various formats of intelligence outputs will be discussed in more detail in Chapter 7 of this dissertation. Ultimately the output of the intelligence process should address the initial requirement for intelligence as identified by the intelligence user. If this is not the case, the process is triggered again.

- **The stages of the process.** The process itself consists of a number of sub-processes or stages/steps. Typically, these include a requirements definition stage, an assessment stage, collection stages, analysis, synthesis and collation stages, as well as dissemination and storage stages. There are a number of different intelligence processes to consider when attempting to produce intelligence output, the majority of them consisting of four to five stages. In the following sections of this chapter, a number of these processes will be briefly discussed.

3.4 *Benchmark intelligence processes*

Kahaner (1998:43) points out that the intelligence processes used by organisations to generate competitive intelligence are often similar to the intelligence process that is employed by the CIA and other intelligence services world-wide. The origins of these intelligence processes could be traced back to the research of Sherman Kent.

3.4.1 *Kent's intelligence process*

Kent's thoughts on the activities involved in the conduct of intelligence could be viewed as a forerunner of several of the typical intelligence processes applied in both intelligence and business organisations. The researcher is of the opinion that Kent's research on intelligence processes not only provided the foundation for many of intelligence processes currently in use, but that his research should still be used as reference point when dealing with difficulties/issues posed by the application of intelligence processes.

Although Kent (1966:151) refers to intelligence activities, he points out that it is better to discuss these activities as a process. He identifies the seven stages in the intelligence process as follows:

- **Stage 1:** The appearance of the problem requiring attention.
- **Stage 2:** Analysis of this problem to discover which facets are of actual importance.
- **Stage 3:** Collection of data relevant to address the problem as was analysed in Stage 2. In this regard Kent points out that this stage involves two steps, a 'survey of data already at hand' and 'an endeavour to procure new data to fill gaps'.
- **Stage 4:** Critical evaluation of collected data.
- **Stage 5:** Study of the evaluated data in order to find some meaning, which he describes as the 'moment of hypothesis'
- **Stage 6:** Collecting data to confirm or deny the hypothesis formulated in Stage 5
- **Stage 7:** Establishing which hypotheses are the most accurate, and presenting the findings to intelligence users to enable them to deal with the problem

Kent (1966:158) acknowledges that his intelligence process poses some methodological problems. Of particular interest is his reference to the difficulty involved in identifying and formulating those problems that require the attention of intelligence staff. He suggests that the answer to this problem lies in 'picking a man who already knows a good deal about the substantive area in which he is supposed to ask questions, and who has an inquiring mind; and then see to it that he has ready access to every scrap of new incoming evidence on it' The initiation of the intelligence process will be discussed further in paragraph 3.6.2.

In analysing this seven-stage process it should be noted that Kent's process was designed long before the advent sophisticated analysis techniques and the supporting information technology that is today commonly used to produce intelligence. His process was therefore geared towards the use of hypothesis

generation for analysis purposes. Having said this, there are a number of key issues for intelligence processes that emerge from Kent's research including the following:

- Of specific importance in Kent's process is the emphasis placed on the need to analyse and understand the problem at hand before attempting to collect information.
- This process also requires a survey of existing data/information before attempting to collect new data/information. This could prevent the inefficiencies created when new information is sought while it may already be available.
- Kent also points out that collection should take place during more than one stage of an intelligence process, especially when hypotheses are generated and need to be verified.

3.4.2 The CIA intelligence cycle

Ackerman and Wickens (2001: 47) mention the fact that the intelligence process applied by the CIA is often viewed as a benchmark intelligence process for both government and business purposes. This process, also referred to as an intelligence cycle, is described by the CIA (2001:online) as 'the process by which raw information is acquired, gathered, transmitted, evaluated and made available as finished intelligence'.

- The processing step involves the 'conversion' of collected raw data into a format that is usable for the analysis step that follows. A typical example of this is the translation of information obtained in foreign languages into the language required by an analyst. Another good example is the conversion of

The intelligence process of the CIA consists of five steps, as depicted below:

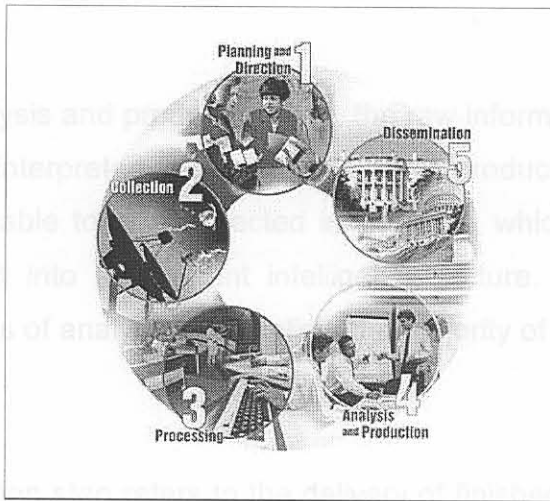


Figure 3.2 The CIA intelligence cycle (Central Intelligence Agency; online)

The key elements of each of the five steps illustrated above are:

- The 'planning and direction' step, which refers to the ongoing management of the intelligence effort. Typically, the intelligence process starts with the identification and analysis of intelligence needs. This leads to the planning of specific collection activities and the directing of all the other steps in the process, which in turn culminates in the delivery of intelligence products.
- During the collection step, raw information required to address intelligence requirements is collected from various information sources by using a variety of collection techniques.
- The processing step involves the 'conversion' of collected raw data into a format that is usable for the analysis step that follows. A typical example of this is the translation of information obtained in foreign languages into the language required by an analyst. Another good example is the conversion of

data from disparate systems in order to view all collected data in a particular format.

- During the analysis and production step, the raw information is evaluated and analysed, and interpreted intelligence output is produced. This step requires analysts to be able to take collected information, which could be disparate, and integrate it into a coherent intelligence picture. In order to do this, various methods of analysis are applied, the majority of them being qualitative in nature.
- The dissemination step refers to the delivery of finished intelligence products to those that provided the requirement for the intelligence. This often leads to further intelligence requirements being formulated, which sets the whole intelligence process in motion again

3.4.3 The application of these intelligence processes in business

It is important to bear in mind that both Kent's process and the CIA intelligence process were specifically designed for the conduct of intelligence assignments for government or military purposes. These processes are therefore particularly suited to those organisations that have the delivery of intelligence as their core business, and have access to the resources required to execute these processes.

In the case of banking institutions, the core business of the organisation does not revolve around the production of intelligence products, but around the provision of banking services and products to clients. Therefore, the application of the processes designed for governmental/military intelligence services in a commercial environment might not be suitable, especially when these processes

prove to be complex and require substantial resources that are often only available to very large corporations and governments.

3.5 Business derivatives of the CIA intelligence process

Based on the CIA intelligence process a number of intelligence processes have been developed for use in the business environment.

3.5.1 Kahaner's process

For competitive intelligence purposes, Kahaner (1998:43) describes an intelligence process very similar to the CIA intelligence cycle. This process, which consists of four steps, can be depicted as follows:

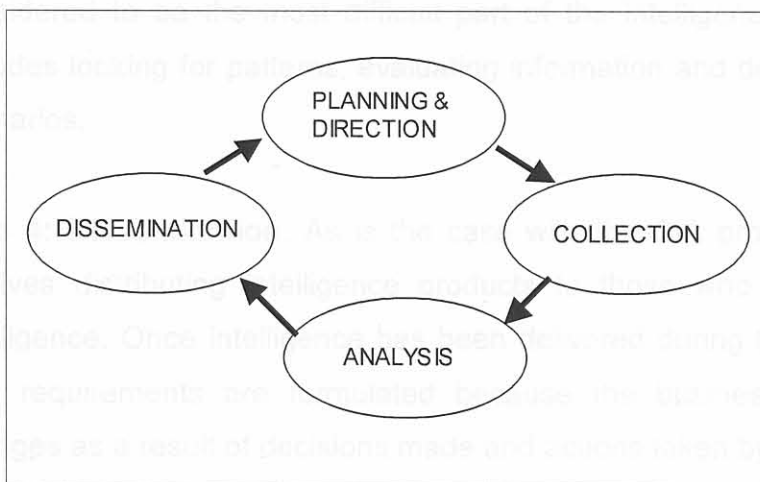


Figure 3.3 The intelligence cycle proposed by Kahaner (Kahaner 1998:44)

- **Step 1: Planning and direction.** During this step, the focus is on obtaining the intelligence requirements of management staff. Once this is completed, BI staff members need to decide how to address these requirements, and which approach should be adopted in this regard.

Kahaner (1998:44) also points out that this step is both the first and the last step of the BI process.

- **Step 2: Collection.** During this step new information, also described by Kahaner as 'raw information', is gathered. This departs from Kent's views that existing information should first be reviewed before collecting new information, but is similar to the collection stage of the CIA process. Kahaner also emphasises the importance of collecting information in the public domain. In addition to collecting information, this step also includes the processing of information into an electronic format for manipulation and storage purposes.
- **Step 3: Analysis.** Kahaner points out that this step is generally considered to be the most difficult part of the intelligence process and includes looking for patterns, evaluating information and defining different scenarios.
- **Step 4: Dissemination.** As is the case with the CIA process, this step involves distributing intelligence products to those who requested the intelligence. Once intelligence has been delivered during the fourth step, new requirements are formulated because the business environment changes as a result of decisions made and actions taken by management.

The researcher is of the opinion that Kahaner's view of the linkage between dissemination and the first step (planning and direction) should be viewed with caution. Kahaner (1998:44) maintains that disseminated intelligence would necessarily lead to decisions and actions, and that these actions would in turn 'spur further intelligence needs' because the 'company's situation undoubtedly will change based on those actions'. This may be oversimplifying the process,

and the researcher's concern with this reasoning is that it is based on the assumption that disseminated intelligence products are used for decision-making and are acted upon. In the researcher's experience, it is not uncommon to find that disseminated intelligence is not acted upon, in which case, according to this intelligence process, the process stops and no new requirements are generated. This intelligence process also does not specifically indicate how the intelligence process could be triggered by anything other than disseminated intelligence. Often environmental information, informal discussions amongst intelligence users, and business events trigger requests for intelligence – disseminated intelligence is not a prerequisite for the intelligence process.

3.5.2 Fuld and Co's intelligence process

Fuld and Co (2001:online) describe an intelligence process that consists of five consecutive steps, each one linked to the other, and emphasise the linkages between the steps as follows: 'it is necessary to plan (step 1) before you retrieve (steps 2 and 3), and retrieve before you analyse in step 4'. They further emphasise the importance of following all the steps, as the omission of any of the steps would impact the quality of the intelligence output produced.

- Step 2: Secondary/Published information collection. According to Fuld and Co (2001:online), this step involves collecting information from existing publications. This differs from the process described by Kahana, as well as the CIA process, in that this step is but one of two steps in the

The intelligence process proposed by Fuld and Co can be depicted as follows:

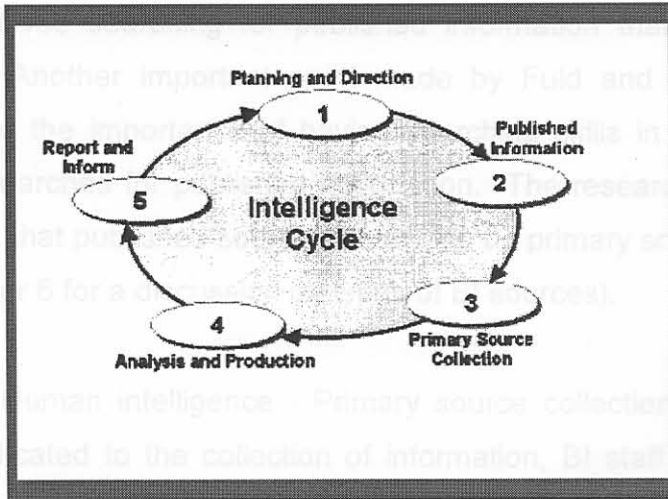


Figure 3.4 The intelligence process proposed by Fuld and Co
(Fuld and Co; online)

- Step 1: Planning and direction. During this step, BI staff members need to identify the key questions and decisions that need to be addressed by intelligence output. This seems to suggest that the intelligence process does not necessarily require intelligence output, as suggested by Kahaner, but that key questions and decisions may act as triggers for the intelligence process. Fuld and Co (2001:online) point out that intelligence teams often rush through this step, but that it could be as crucial as the analysis step since it provides the direction or framework for the execution of the other steps of the intelligence process.
- Step 2: Secondary/Published information collection. According to Fuld and Co (2001:online), this step involves collecting information from existing publications. This differs from the process described by Kahaner, as well as the CIA process, in that this step is but one of two steps in the

process dedicated to the collection of information. Fuld and Co (2001:online) warn that BI staff members need to be aware that this step also involves searching for published information that is not available online. Another important point made by Fuld and Co (2001:online) relates to the importance of having searching skills in order to conduct proper searches for published information. The researcher would like to point out that published sources could also be primary sources. (Also refer to Chapter 6 for a discussion on types of BI sources).

From the researcher's perspective, this is an improvement on the process as

- Step 3: Human intelligence - Primary source collection. In the second step dedicated to the collection of information, BI staff members collect information through contact with human sources of information. The importance of these sources for the collection step cannot be over-emphasised. From the researchers perspective, Fuld and Co's (2001:online) process may create some confusion, as humans are not necessarily primary sources, especially when they provide information that they have heard from another person or have read. In such cases the person would be a secondary source. Of importance though is the fact that Fuld and Co (2001:online) elevates the importance of collecting from human sources, a key issue that seems to be understated in the intelligence process discussed by Kahaner in paragraph 3.5.1.

3.5.3 The Delta Competitive Intelligence Cycle

- Step 4: Analysis and production. This step involves all the tasks required to turn collected data and information into intelligence. According to Fuld and Co (2001:online), this step involves more than the synthesis of information, but also includes an analysis process in order to provide judgements, possible outcomes and conclusions. Fuld and Co (2001:online) point out that the analysis step is the most important step of the process, and that quantitative analysis is not deemed to be 'true

analysis' from an intelligence perspective.

- Step 5: Report and inform. This step of the intelligence process, involves delivering the output of the analysis and production steps to intelligence users. In this regard, Fuld and Co (2001:online) stresses the importance of intelligence staff of being able to deliver intelligence output in a coherent and convincing manner to intelligence users.

From the researcher's perspective, this is an improvement on the process as described by Kahaner and seems to be an enhancement of the CIA intelligence process. Of some concern is the focus placed on collecting information, with two specific steps dedicated to this activity. The researcher's main concern regarding this process, as was the case with Kahaner's process, is that the collection of new information is conducted without having assessed the existing internal information and existing intelligence at the disposal of BI staff. Especially when dealing with time and financial constraints, it may be more efficient for BI staff members to first review information that is already available to them before spending time and possible financial resources on collecting new information. In Kent's process (par 3.4.1), new information is collected in order to address the information gaps only after the information already available has been reviewed.

3.5.3 The Delta Competitive Intelligence Cycle

One of the intelligence processes that warrant further study is the Delta Intelligence Model developed by Adrian Farrell (2001a). This model which, could also be described as a competitive intelligence derivative of the CIA process, has a unique approach in some respects and consists of six phases, which can be depicted as follows:

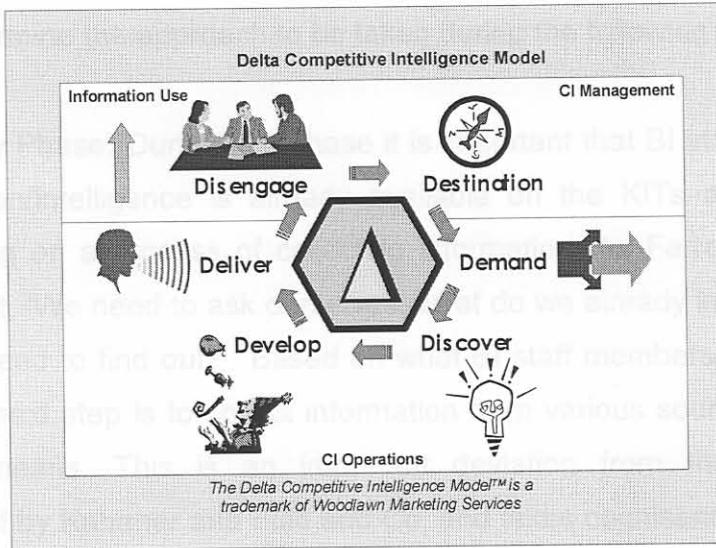


Figure 3.5 The Delta competitive intelligence model (Farrell; online)

- Destination Phase: This is the first phase of the process and the emphasis is on planning and the development of the intelligence capabilities in order to deal with BI assignments. Farrell (2001a:online) points out that this phase is not part of the 'day-to-day' intelligence activity as it involves the training of intelligence staff and the implementation of systems and processes to deal with BI assignments. Only once the organisation has created the capacity to deal with intelligence assignments, can these assignments be accepted and dealt with.
- Demand Phase: With the BI capability in place, the demand phase is the phase during which an intelligence assignment starts. The first step in this phase deals with the identification of intelligence requirements/needs. Typically, it is during this stage that Key Intelligence Topics (KITs) and Key Intelligence Questions (KIQs) are formulated in order to specify exactly which

intelligence is required by the intelligence users. During this stage, BI staff also determine the approach to be taken during the following phases.

- **Discovery Phase:** During this phase it is important that BI staff discover what information/intelligence is already available on the KITs and KIQs before embarking on a process of collecting information. As Farrell (2001a:online) points out, 'We need to ask ourselves, what do we already know and what do we still need to find out?' Based on what BI staff members still need to find out, the next step is to collect information from various sources by legal and ethical means. This is an important deviation from the processes as described by Kahaner and Fuld and Co, and takes cognisance of the views of Kent on the importance to conduct a 'survey of data already at hand before collecting new information' (also refer to Stage 3 of Kent's process in paragraph 3.4.1).
- **Development Phase:** During this phase all relevant pieces of information that have been discovered are analysed in order to create a meaningful picture. This corresponds with the views of Kent (Stage 5). This phase typically involves the evaluation of information in terms of relevance and accuracy before collected information is collated, analysed and synthesised. During this phase it is important to determine if enough relevant information was collected in order to address the BI requirement. If not, additional collection should be done, which could see the process moving from the development stage backwards to the discovery phase.
- **Delivery Phase:** During this phase, the intelligence generated through the analysis and synthesis steps of the development phase is stored and disseminated to intelligence users. This phase is similar to the dissemination steps/stages of the previous intelligence processes. Of importance is the

emphasis that Farrell places on storage. Kahaner refers to the processing of information in order to electronically manipulate and store information as part of the collection step. What Farrell refers to is the storage of intelligence products in order to make them accessible for later use.

- Disengagement Phase: This phase is unique to the Delta process and includes activities such as the debriefing of intelligence users and a specific process of reflection in order to improve the intelligence process. Farrell (2001a:online) argues for the inclusion of this phase as follows: 'This is an important element missing from the CIA intelligence process. Single-loop learning takes place through reflection on what occurred and by identifying ways to improve the process next time'. The inclusion of this step ensures quality in the process.

3.6 Challenging typical intelligence processes

A number of scholars challenge the notion of producing actionable intelligence output by applying the typical four/five stage intelligence process. They argue that it is an oversimplification of a complex undertaking. In this regard, the views of Underwood and Baumard are of significance.

3.6.1 A Project Management approach

Underwood (2002:9) argues that the traditional view of describing the intelligence process 'does not reveal what the process is really about'. He points out that the actual process is usually more complex than is suggested by the typical four-stage cycle.

Underwood (2002:10) describes a nine-stage process that could be depicted as follows:

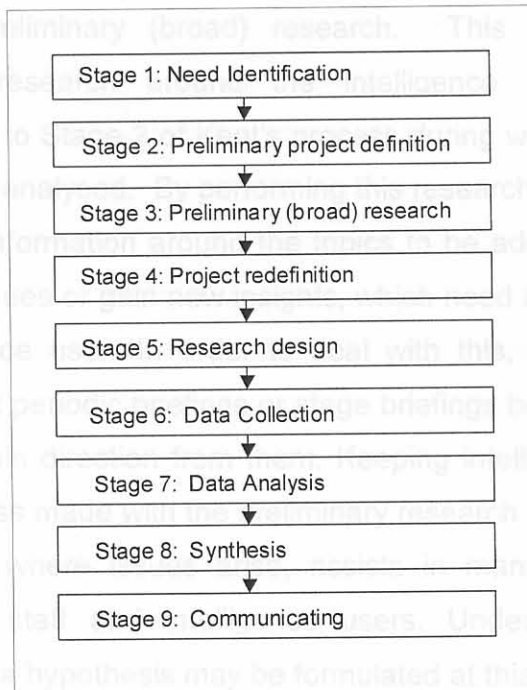


Figure 3.6 A nine stage intelligence process (Underwood 2002:10)

- Stage 1: Need identification. The first stage of this intelligence process revolves around accurately determining the actual need of the intelligence user that is supposed to be met by the BI. Of particular importance during this stage is that intelligence staff should be informed about the impact or importance of the project, the urgency, and the turnaround time required. Like Farrell and Fuld, Underwood does not see the need for disseminated intelligence to trigger the intelligence process.
- Stage 2: Preliminary project definition. Based on the understanding of the actual need for intelligence, a preliminary project definition is completed. This determines the scope of the project. The next stage in this process is

triggered on the basis of this definition of the scope of the project.

- Stage 3: Preliminary (broad) research. This stage involves doing preliminary research around the intelligence need and shows a resemblance to Stage 2 of Kent's process during which the problem to be addressed is analysed. By performing this research, BI staff members not only obtain information around the topics to be addressed, but may also encounter issues or gain new insights, which need to be communicated to the intelligence user. In order to deal with this, Underwood (2002:49) suggests that periodic briefings or stage briefings be held with intelligence users to obtain direction from them. Keeping intelligence users informed of the progress made with the preliminary research and consulting them to obtain input where issues arise, assists in managing the relationship between BI staff and intelligence users. Underwood (2002:50) also explains that a hypothesis may be formulated at this stage of the process.
- Stage 4: Project redefinition. Underwood (2002:50) suggests that, owing to the fact that new issues may be identified during the preliminary research, which could impact the scope of the project, a redefinition of the project might be required.
- Stage 5: Based on the definition of the project and the preliminary research, a research design is compiled. In this regard Underwood (2002:50) points out that 'no two projects are identical', and that it is important that the final research design must be able to address the intelligence users' needs.
- Stages 6-9: These stages are similar to the stages of the typical intelligence processes as discussed in paragraph 3.5. Data/information is

collected during Stage 6 and collected data is analysed during Stage 7. In Stage 8, the analysed information is synthesised and interpreted. This leads to the final stage, which involves 'communicating the knowledge'.

From the researcher's perspective it is important to take note of the following:

- At various stages in this process, Underwood proposes that communication take place between intelligence staff and intelligence users. He uses the term 'stage briefings' to indicate that intelligence users are 'briefed' on the status of the project and that input is obtained from them.
- Another important contribution made by Underwood is the detailed breakdown of the planning stage of the BI process. As opposed to the typical intelligence process approach, where planning and direction is depicted as the first stage of the process, in this process there is an initial planning stage and once the broad research is completed, the re-planning/definition stage is executed. This assist with addressing the misconception that planning is only done during the first/initial stage of the intelligence process.
- The clear distinction made between analysis and synthesis as two separate stages in the process also helps to explain that the 'analysis process' depicted in intelligence processes consist of more than just the analysis of information, but also requires a definite synthesis stage.
- Finally, Underwood's process applies some project management fundamentals in dealing with intelligence assignments. This allows for the optimal utilisation of BI resources and ultimately could enhance the

management of relations between intelligence users and intelligence staff members.

3.6.2 Challenging the notion that the intelligence process is a 'cycle'

Baumard (Sigurson and Tagerud, 1992:88) questions the validity of explaining and depicting the intelligence process as a cycle. In a stance that could be considered controversial, Baumard (Sigurson and Tagerud, 1992:88) argues that depicting an intelligence process as a cycle is in fact an attempt by intelligence managers to move 'from self deception to self-deception', because intelligence output, which could be faulty, is used as a starting point for the definition of new intelligence requirements. According to Baumard, in the typical intelligence process it is not possible to define requirements for intelligence without using intelligence output, and none of the steps in the typical intelligence process can exist before the preceding stage of the intelligence process. To address this issue, he (Sigurson and Tagerud, 1992:88) suggests that 'one must seek a starting point because of the impossibility of doing anything else'. In Baumard's view, the answer to this dilemma is to perform environmental scanning and, based on what is learned from this process, requirements for intelligence could be generated without using the intelligence output of the intelligence process as the starting point. This powerful argument, which challenges the typical view of intelligence processes as being cyclical in nature, emphasises the need to have a logical starting point for the intelligence process.

3.7 Taking note of shortcomings and issues with intelligence processes

In the previous two sections a number of intelligence processes were discussed as well as some of the concerns scholars have with these intelligence processes. In this regard it should be noted that there are intelligence processes designed

that take cognisance of the shortcomings of the processes previously discussed. The Alpha cycle is an example of an intelligence process that was designed for use in banking institutions and to address some of the shortcomings of other processes. The Alpha Cycle is another derivative of a number of military and commercial intelligence processes and was initially designed for the conduct of customer intelligence assignments in financial services institutions (Ackerman and Wickens, 2001:50). Although designed to support customer intelligence projects, this process, with some adaptation, could also be used for other types of intelligence assignments. The Alpha Cycle differs to some extent from traditional views of the intelligence process in that it takes cognisance of Baumard's issue of having a definite starting point and incorporates some project-management concepts, as was done by Underwood. The Alpha cycle also supports the notion that the conduct of intelligence is conducted in a cycle, but differs from typical intelligence processes in that intelligence requirements may be initiated from parties external to the organisation, i.e. its customers.

To address Baumard's issue regarding the need for a specific starting point before defining intelligence requirements, the Alpha intelligence cycle revolves around a business issue, question or problem that needs to be resolved by the organisation or customer. This is similar to Kent's reasoning in Stage 1 of his process (see paragraph 3.4.1). This business issue, question or problem could be identified as a result of a number of factors, including scanning the business environment, discussing and identifying new business trends, demands from customers, changes in the business environment and increased threats from competitors, to name but a few. In addition to this, business issues, questions or problems could be identified as a result of intelligence products that were disseminated to intelligence users. This allows for a situation where intelligence is disseminated to intelligence users to address a particular issue and, based on the intelligence received, they identify further needs for intelligence.

The Alpha Cycle consists of five stages and could be depicted as follows:

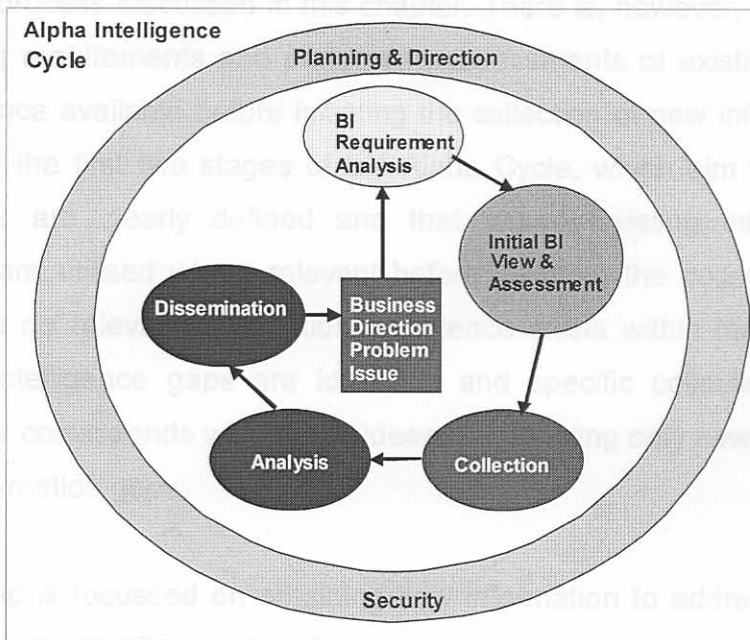


Figure 3.7 The Alpha Cycle (Ackerman and Wickens 2001:50)

As opposed to those intelligence processes where 'planning and direction' are deemed to represent a specific stage in this process, this is not the case with the Alpha cycle. Ackerman and Wickens (2001:50) argue that planning and direction are essential to all the stages in the intelligence process and are done throughout the process, and should therefore not be seen as a step of the process itself, but rather a pre-requisite to ensure that the process is executed and delivers the required intelligence. According to Ackerman and Wickens (2001:18), management of the intelligence process includes determining the scope of intelligence projects/assignments and contracting on deliverables with intelligence users. Planning and direction also include the prioritisation of intelligence requests, and the performance of tasks related to resource management for the intelligence process.

The five basic stages of this process show some similarities with the typical intelligence process discussed in this chapter. There is, however, a strong focus on analysing requirements and performing assessments of existing information and intelligence available before initiating the collection of new information. This is evident in the first two stages of the Alpha Cycle, which aim to ensure that requirements are clearly defined and that already-existing intelligence and information are utilised where relevant before initiating the collection stage. In cases where no relevant information/intelligence exists within the organisation, information/intelligence gaps are identified and specific collection efforts are initiated. This corresponds with Kent's ideas on collecting only new information to address information gaps.

The third step is focussed on obtaining new information to address information gaps that were identified during the assessment stage. In this process, the processing of raw information as referred to in the CIA process, forms part of the collection stage. This implies that, should there be a need to translate or convert data/information into a specific format, this is done as part of the collection effort.

During the analysis stage information is evaluated, analysed, collated, synthesised and interpreted within the context of addressing the specific intelligence requirement, and ultimately the business issue/problem that triggered the requirement.

In the dissemination stage intelligence products are compiled and reviewed before being delivered to intelligence users. Although not as prominent as is the case with the Delta Model, obtaining feedback and input from intelligence users is part of the dissemination stage.

As is the case with many intelligence processes, the Alpha Cycle, as depicted above, does not convey the complex nature and interaction between various

stages of the process. In each of the stages, the potential exist that BI staff members may actually need to review the outputs/results of the preceding stages and re-work previous stages before continuing with the next step in the process. A typical example of this could be where new information is collected (during Stage 3) that indicates a lack of understanding of the requirement. This could lead to a situation where the requirement is re-defined and Stage 2 (assessment) is also reviewed before continuing with the process. Underwood's process makes provision for dealing with this as part of the project redefinition stage.

Another example of the interaction between processes occurs when the collection of new information is still in progress when the analysis of information is initiated. This is typically the case when, especially as a result of time constraints, BI staff members need to start with the analysis of information before having received all the information that has been collected.

3.8 Conclusion

The processes discussed in the previous paragraphs provide some insight with regard to the typical intelligence processes that are used in the conduct of business intelligence. Although all the above-mentioned processes could be used to generate intelligence output for banking institutions, some of these processes are more complex in nature than is generally anticipated, and it is not uncommon to find that some of them are too cumbersome to apply in banking institutions, especially when dealing with resource constraints. It should also be noted that specific steps/stages of the above processes might not be suited to specific intelligence assignments performed in SA banking institutions.

The researcher is of the opinion that the Alpha cycle provides a sound framework for the development of BI process models for banking institutions as it considers specific issues/concerns raised around the typical intelligence process,

whilst remaining focussed on the fundamental thoughts of Kent which, 37 years after publication, remain relevant for the conduct of intelligence today.

In the following chapters of this dissertation, four stages typically found in intelligence processes including namely 'requirements definition', 'collection', 'analysis' and dissemination', will be used as a framework for the discussion of intelligence processes used in SA banking institutions.

Although the process of defining an organisation's BI requirements is typically the starting point for an intelligence process, and as such a critical success factor for the delivery of actionable intelligence, Herring (cited in Prescott and Miller, 2001: 241) points out that "surprisingly, there has been very little professionally written on this topic".

From the outset it should be noted that there is a difference between information needs and intelligence requirements. Intelligence requirements refer to specific requirements for intelligence (also refer to the definition of intelligence in Chapter 2, paragraph 2.7) and do not refer to a need for information. It is therefore important that BI staff members should distinguish between information needs and intelligence requirements, because their primary role in an organisation is to provide actionable intelligence and not information.

According to Herring (cited in Prescott and Miller, 2001: 241), it is critical in any intelligence assignment to meet the business user's real intelligence needs and doing it in such a manner that would lead to someone acting on the intelligence. This requires intelligence staff to follow a process that will define intelligence requirements at a level of detail that will enable them to plan and execute the stages of the intelligence process.

¹See P. Herring (cited in Prescott and Miller, 2001: 240)