

## CHAPTER 7: Disseminating Business Intelligence products

*'Intelligence departments can produce great intelligence, but management has to understand and appreciate it or it will not be used'.<sup>6</sup>*

### 7.1 Introduction

Once data, information and knowledge have been turned into intelligence during the analysis and synthesis stage of the BI process, this intelligence output needs to be disseminated to intelligence users in order to complete the BI process. Kahaner (1998:132) refers to the dissemination stage as the 'moment of truth'.

The purpose of the dissemination stage of the BI process is to provide the right intelligence product to the right person in the correct format exactly when and where it is required.

In essence the dissemination stage can be described as consisting of two processes. The first process aims to add value to the output of the analysis and synthesis stage of the BI process by doing further synthesis and packaging the intelligence in an intelligence product format. The second process involves communicating the intelligence product to intelligence users.

The aim of this chapter is to:

- Review existing literature on the formats and methods used for the dissemination of BI products
- Refer to the BI dissemination formats and methods used by SA banking institutions and to propose a BI dissemination process that could be applied within a banking institution

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<sup>6</sup> J. Herring (cited in Sigurdson, J.S. and Tagerud Y, 2001:167)

Although BI dissemination is extensively discussed in BI literature, on closer analysis writers seem to emphasise the methods and formats to be used for disseminating intelligence and not the process required for executing the dissemination stage. By considering the results from research done with SA banking institutions on the topic, as well as some research on BI dissemination practices used by international financial institutions, the researcher proposes a step-by-step dissemination process in this chapter.

In this chapter, the importance of the dissemination stage within the context of the BI process is briefly discussed before a number of approaches that BI staff might consider for the dissemination of BI products are reviewed. Various dissemination methods and formats available for BI dissemination are discussed in two sections before a step-by-step dissemination process is described. In the final section of this chapter, brief guidelines are given for successful dissemination.

## **7.2 The importance of the dissemination stage**

As the last stage of many BI processes, dissemination is not less important than the preceding analysis and synthesis stage. Dissemination could be considered one of the most important stages, as Kahaner (1998:132) points out when he says that 'this is when you give management answers to their questions'.

Typically, BI analysts place a lot of emphasis on turning disparate and often contradictory pieces of information into meaningful intelligence during the analysis and synthesis stage of the BI process. Often not enough emphasis is placed on the proper dissemination of the intelligence, as is confirmed by Kahaner (1998:132) when he refers to the dissemination stage as 'also a time when most competitive intelligence projects fail'. BI analysts need to ensure that

they effectively communicate the insight gained from the analysis and synthesis stage and be able to make recommendations to intelligence users. Herring (1992:163) maintains that 'it is not sufficient to merely produce business intelligence in a clear, concise and credible form: for intelligence to be truly actionable, it must be communicated in such a manner as to cause those in position of responsibility to act upon it'.

If the dissemination of BI products is not effectively executed, it could be argued that the value of the whole BI process would be negatively impacted. The importance of proper dissemination is highlighted by writers such as McGonagle and Vella (1993:290), when they refer to intelligence products as follows: 'to be used it must be given to those who need it, in a suitable format, and in a timely manner'. Tyson (cited in Bernhardt, 1993:101) echoes Kahaner's views when he states, 'packaging of intelligence can many times make or break a key strategic or tactical decision. As such, we can never assume that good analysis stands on its own'.

Apart from ensuring that BI products are effectively communicated, the importance of having a quality assurance component in a dissemination process also needs to be emphasised. Quality assurance is critical, because of the fact that BI products could have a direct influence on decisions made and the resulting actions that are taken by intelligence users. Ackerman and Wickens (2001:124) confirm this when they say, 'the better the quality of the intelligence products, the better the chances of making sound decisions and taking appropriate action'.

### **7.3 Approaches for intelligence dissemination**

Given the importance of the BI dissemination stage, it is advisable not to approach this stage in an ad hoc manner. In this regard a number of BI

dissemination approaches should be considered. Some of the typical BI dissemination approaches include the 'push/pull' approach, predetermined BI programmes and product hierarchies. Each of these approaches will be discussed in the following paragraphs.

### 7.3.1. The 'push/pull' approach

As in the case with the proactive and reactive approaches for BI requirements definition (as discussed in paragraph 4.4.1 and 4.4.2), during the dissemination stage, BI staff members have the option of taking the initiative to disseminate BI products to intelligence users (push) and/or to allow intelligence users to access the required BI products when they need it (pull). Generally, in cases where intelligence users have defined specific requirements for BI products, intelligence users would expect the BI products to be disseminated (pushed) to them. The same applies to a situation where intelligence users have provided BI staff with topics on which they would like to receive BI products on an ongoing basis, or where intelligence users are put on a distribution list for BI products that are on the BI production schedules. One of the disadvantages of the push approach is that BI staff may disseminate BI products to intelligence users who have no interest in receiving these products. This requires BI staff to obtain feedback from intelligence users as to the utilisation of BI products and to regularly review/update BI distribution lists. One of the advantages of the push approach is that BI staff members remain responsible for ensuring that BI products are disseminated to those intelligence users that have a need for them, and to those who are on a distribution list. The pull approach requires intelligence users to take responsibility for obtaining access to the BI products they require. To some BI staff members this may seem a preferred approach in that they cannot be held responsible for disseminating BI products to intelligence users who have no need for them. The pull approach can also prove to be problematic, especially

when intelligence users cannot find and retrieve the required BI products from a repository/database. With the pull approach, BI staff members also need to ensure that each time a new BI product is available on the database, intelligence users are alerted to this fact and access is monitored. All three banking institutions that participated in this research use a combination of the push and pull approaches. In one banking institution, there is a strong emphasis on limiting the push approach in favour of a pull approach. In these SA banking institutions those BI products that are compiled on a monthly and quarterly basis are typically 'pushed' to intelligence users. The daily/weekly current awareness/intelligence reports are typically stored in an intelligence database or in a knowledgebase, which can be accessed by intelligence users themselves. In order for intelligence users to gain access to BI products, all the participating banking institutions have intelligence/knowledge databases that are accessible through the corporate intranet. Two of the banking institutions have purpose-built intelligence systems to support their intelligence processes. In one of the banks, a process was implemented that alerts intelligence users according to their interest profiles when new BI products are available in order to facilitate a 'pull' approach.

### 7.3.2 Predetermined BI production schedules

This approach can be directly linked with the approaches discussed in section 4.4, relating to dealing with BI requirements. When dealing with BI requirements that require intelligence products to be disseminated at regular intervals, a predetermined BI schedule should be considered. Once such a BI production schedule has been compiled and agreed on with intelligence users, BI staff members know when to prepare and disseminate BI products to specific intelligence users, and these users know when to expect these products. This approach can also be used when dealing with intelligence for strategic planning

cycles. Once the dates for a strategic planning cycle have been determined, BI staff can plan to deliver strategic assessments and estimates at a particular time as input for these cycles. Although this approach provides structure and assists with planning for BI assignments, it should be noted that requirements for specific BI products might arise which could not be addressed by the predetermined set of scheduled products. In all the SA banking institutions that participated in this research, BI reports/briefings are produced and disseminated using a predefined schedule approach. All these banking institutions acknowledge that predefined scheduled products do not cater for all BI requirements, and that specific BI products are compiled and disseminated in addition to scheduled BI products. Although there are some differences in the types of BI products disseminated in SA banking institutions, the intervals at which BI products are provided correspond. A typical example is that of BI reports/briefings regarding competitor activities and market trends, which are typically disseminated on a monthly and quarterly basis in SA banking institutions.

### 7.3.3 A hierarchy of intelligence products

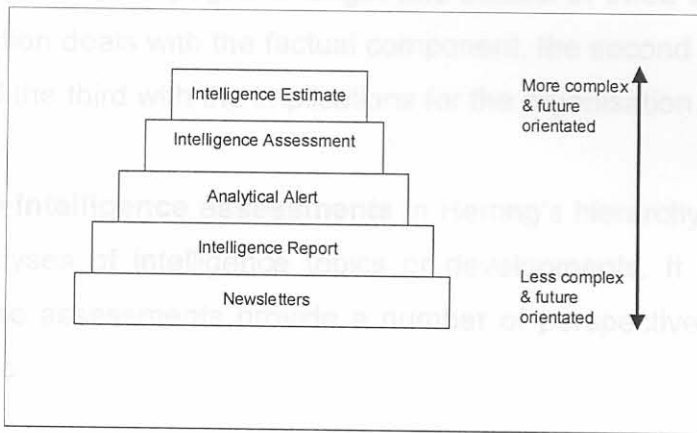
(Herring cited in Sigurdson and Tagerud, 1992:165)

Herring (cited in Sigurdson and Tagerud, 1992:165) states that 'there is no single intelligence product that fits all needs. There is a hierarchy of intelligence products to be considered'. This 'intelligence hierarchy' approach is also supported by Tyson (cited in Bernhardt, 1993:104), who suggests that an intelligence hierarchy is essential for the dissemination of BI products. Typically, such an intelligence hierarchy distinguishes between various types of BI products, with each type suited to different uses. In these hierarchies a distinction can be made between BI reports that are time based (disseminated at specific intervals) and those that are topic orientated. Both Herring and Tyson developed specific intelligence hierarchies and participating SA banking

institutions also make use of intelligence hierarchies. These hierarchies are briefly discussed in the following sections.

### 7.3.3.1 Herring's intelligence hierarchy

Herring's hierarchy distinguishes between newsletters, intelligence reports, analytical alerts, intelligence assessments and intelligence estimates and can be depicted as follows:



**Figure 7.1 Herring's intelligence hierarchy**  
(Herring cited in Sigurdson and Tagerud, 1992:165)

- **Newsletters** are the most basic of the BI products and contain information obtained from various open sources. It should be noted that in terms of the definition of BI as discussed in paragraph 2.7, these newsletters would not be defined as BI products by the researcher.
- The **intelligence reports** referred to by Herring in this hierarchy are concise (typically one page in length) and factual intelligence reports that describe particular events/issues at a particular point in time.

Typically, these reports should include an indication of the impact of the particular event on the organisation. Herring refers to intelligence reports as providing a 'snapshot' or intelligence picture in time.

- The next level in Herring's intelligence hierarchy is the **analytical alert**. These intelligence reports are more comprehensive in nature than the basic intelligence reports. Typically several events/issues are analysed and synthesised. According to Herring, these reports are usually no more than two pages in length and consist of three sections. The first section deals with the factual component, the second with the analysis, and the third with the implications for the organisation.
- The **intelligence assessments** in Herring's hierarchy refer to in-depth analyses of intelligence topics or developments. It is important that these assessments provide a number of perspectives on a particular topic.
- According to Herring, the **intelligence estimate** is the most comprehensive of BI products and is therefore placed at the top of this hierarchy. An estimate involves not only an assessment of a particular topic from various perspectives, but also the assessment of a number of topics/issues with specific emphasis on what to expect in future. Herring (cited in Sigurdson and Tagerud, 1992:167) refers to estimates as 'the best way to help management envision the future the company is likely to face'.
- Except for the fact that it includes newsletters as part of the intelligence hierarchy, Herring's model cannot be faulted. It provides for a number of reports, each with a specific purpose, and as BI staff



members move upwards in this dissemination hierarchy the complexity and scope of the BI products increase. Although a future/predictive element can be included in reports at all levels in this hierarchy, it is particularly at the estimate level that much emphasis is placed on this. It should be noted that Herring does not refer to briefings or presentations in his hierarchy, but it is assumed that, depending on the BI requirement, the reports mentioned could be packaged into either intelligence reports or briefings.

### 7.3.3.2 Tyson's intelligence hierarchy

In Tyson's intelligence hierarchy a distinction is made between intelligence products for tactical and for strategic purposes. These products are also linked to intelligence users operating at tactical and strategic levels within the organisation. Tyson's hierarchy can be depicted as follows:

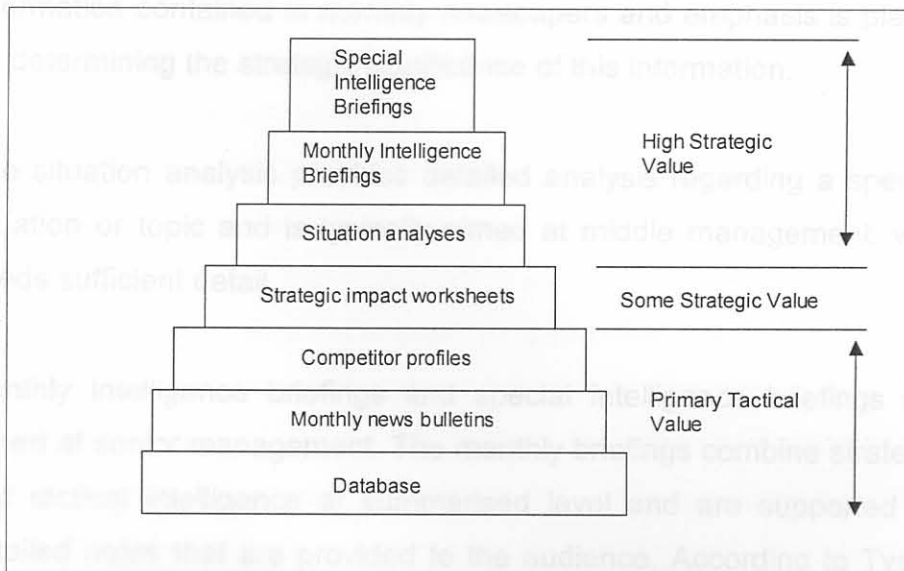


Figure 7.2 Tyson's intelligence hierarchy (cited in Bernhardt, 1993:104)

- At the bottom of this model is a database containing 'raw' information. Tyson call this 'the lowest level'. According to Tyson (cited in Bernhardt,1993:104), the information contained in this database is used to produce monthly news bulletins, which are aimed at staff members that operate at tactical levels in the organisation.
- The second layer consists of intelligence profiles that contain detail and summary information on competitors, customers or markets. These profiles are compiled and updated by using the information contained in the monthly news bulletins.
- According to Tyson (cited in Bernhardt,1993:104) the third layer, consisting of strategic impact worksheets, is the level where 'intelligence begins to be formed' and where 'the product has strategic value' for BI users. The worksheet is compiled by summarising information contained in monthly newspapers and emphasis is placed on determining the strategic significance of this information.
- The situation analysis provides detailed analysis regarding a specific situation or topic and is typically aimed at middle management, who needs sufficient detail.
- Monthly intelligence briefings and special intelligence briefings are aimed at senior management. The monthly briefings combine strategic and tactical intelligence at summarised level and are supported by detailed notes that are provided to the audience. According to Tyson (cited in Bernhardt,1993:107), the special intelligence briefings are brief (1-2 pages) and focus on specific issues.

From the researcher's perspective, an inspection of this model raises a number of concerns:

- **Database.** Firstly, the storage of raw information for BI dissemination purposes should not be encouraged. The emphasis should rather be on storage of relevant data, information and knowledge that have been properly validated during the sixth step of the collection process (as discussed in paragraph 5.6.2). When compiling intelligence products, analysts should preferably not have to start with the validation of the information on the database. A better approach is to have access to a database where validated data/information/knowledge and all previous intelligence products are stored.
- **Monthly news bulletins.** The news bulletin in Tyson's model is an information product and not an intelligence product, and as such should not be included in an intelligence hierarchy. It does not make sense to use BI staff to repackage existing information into a news bulletin format, especially since this could be done by information scientists or library staff. Typically, current awareness bulletins providing information of interest can address this level of the hierarchy. The publication of a monthly product also raises some concerns as intelligence users may not be able to wait for a month to pass before obtaining the information contained in this product. An alternative solution to this is to produce a concise internal intelligence bulletin and distributing it weekly, or at least bi-weekly. In SA banking institutions information products of this type are disseminated weekly or daily to intelligence users.

- In the case of one of these banks, a five tiered hierarchy is applied for the dissemination of intelligence.
- In Tyson's (cited in Bernhardt, 1993:104) description of the strategic impact worksheet, reference is made to the summarising of information contained in monthly news bulletins before making 'an initial pass at determining the strategic and tactical significance of each item'. As was pointed out in the previous chapter, in order to produce intelligence, a process involving the analysis, synthesis and interpretation of relevant data, information and knowledge is required. It is not clear if the 'initial pass' that Tyson refers to can indeed generate intelligence products that could be disseminated as BI products.

### 7.3.3.3 Intelligence hierarchies of SA banking institutions

All the SA banking institutions that participated in this research have adopted a BI product hierarchy approach. Some of these hierarchies show a strong resemblance to Herring's hierarchy.

Proactive alerts contain information obtained from the business press that might be of interest to intelligence users. These alerts do not contain intelligence, as is the case with Herring's hierarchy, but contain filtered information and could be compared to a news-clipping service. The purpose of these alerts is to keep the intelligence users informed on key intelligence topics by providing them with a daily flow of information. To compile these alerts, BI staff members scan the business press daily and information is filtered according to the KITs of the organisation and the interest profile of intelligence users. Relevant articles are then collated in an electronic bulletin. The bulletin is not disseminated, but an abstract is compiled and pushed to the users using electronic mail. Based on the

In the case of one of these banks, a five-tiered hierarchy is applied for the dissemination of BI products. This hierarchy can be depicted as follows:

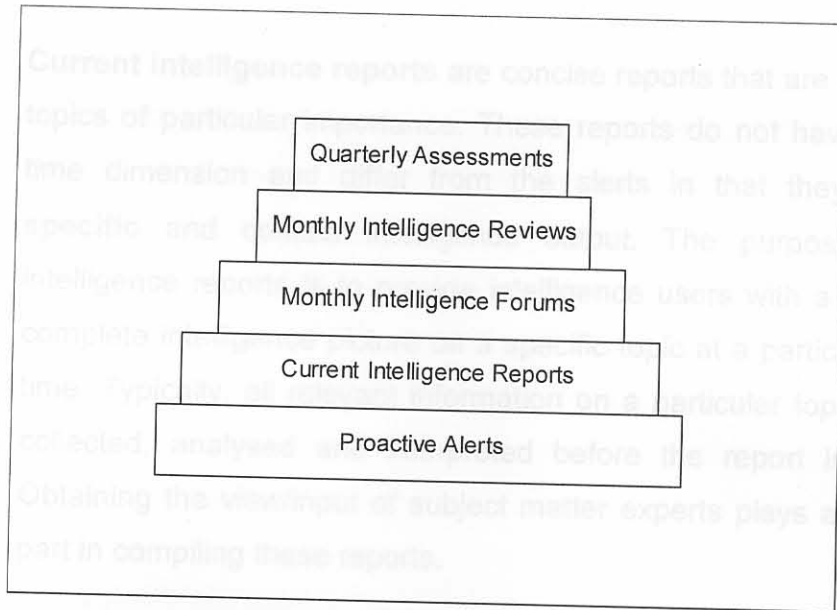


Figure 7.3. Example: Intelligence hierarchy of a SA banking institution

- At the bottom of this hierarchy, **proactive alerts** contain information obtained from the business press that might be of interest to intelligence users. These alerts do not contain intelligence, as is the case with Herring's hierarchy, but contain filtered information and could be compared to a news-clipping service. The purpose of these alerts is to keep the intelligence users informed on key intelligence topics by providing them with a daily flow of information. To compile these alerts, BI staff members scan the business press daily and information is filtered according to the KITs of the organisation and the interest profiles of intelligence users. Relevant articles are then collated in an electronic bulletin. The bulletin is not disseminated, but an abstract is compiled and pushed to the users using electronic mail. Based on the

contents of the abstract, the users can then access (pull) the contents of the 'Alert' from an internal intelligence database.

- **Current intelligence reports** are concise reports that are compiled on topics of particular importance. These reports do not have a specific time dimension and differ from the alerts in that they are **topic specific** and contain intelligence output. The purpose of these intelligence reports is to provide intelligence users with a concise yet complete intelligence picture on a specific topic at a particular point in time. Typically, all relevant information on a particular topic would be collected, analysed and interpreted before the report is compiled. Obtaining the view/input of subject matter experts plays an important part in compiling these reports.
- **Monthly intelligence forums** consisting of representatives of various business units meet monthly to present intelligence products, discuss the main findings of the intelligence products, and exchange ideas. At these meetings further intelligence requirements are also often formulated.
- **Monthly intelligence reviews**, which are linked to the strategic intelligence requirements and other intelligence topics that require a monthly update on the intelligence picture, also form part of this hierarchy. These reviews, published in report format, are not topic specific, but rather provide the intelligence user with an overview of relevant intelligence topics over a period of one month. Relevant topics are analysed throughout the month and at the end of the period intelligence is generated using the information collected on the topic during that month. A typical example would be a monthly intelligence

7.4.1 **Peer review** covering the main activities of competitor banking institutions during the month, implications for the organisation, and an indication of what could be expected from competitors in the future.

- **Quarterly intelligence reviews/assessments.** These reviews/assessments are more comprehensive than the monthly reviews, are topic specific, and focus on strategic intelligence requirements and KITS. Monthly intelligence reviews are generally used as input for the production of quarterly intelligence reviews/assessments. It should be noted that all the banking institutions that participated in this research conduct quarterly BI reviews that relate in particular to competitor activities and market trends.

#### **7.4 Methods for BI dissemination**

When choosing a method for BI dissemination, staff members need to ensure that BI products reach the end users in the most effective manner. In this regard, McGonagle and Vella (1993:290) explain that the need for clarity, accuracy, speed and security should be taken into account when deciding on a method for dissemination. There are a number of BI dissemination methods that could be considered. They include the following:

that BI reports are typically electronically distributed (except in cases where the topic is extremely sensitive in nature and that on receipt they are printed by the intelligence user for easy reading). In the SA banking institutions that participated in this research, written BI reports, both in printed and electronic form, are widely used as a method for disseminating intelligence.

#### 7.4.1 Providing written/printed reports

Gilad and Gilad (1988:154) refer to printed reports as the 'mainstay of the business intelligence system', and believe that they 'will exist alongside any other dissemination method that may be used'. West (2001:170) confirms that printed reports are still used in a high proportion of companies but, unlike Gilad and Gilad, he maintains that these reports are more likely to be electronically distributed than physically copied. West acknowledges that there is a preference among decision-makers to absorb data off a page rather than to read it on a screen. The preference of intelligence users to read printed reports makes this method of dissemination very effective. One of the advantages of using printed reports is that it allows intelligence users to read and make notes/comments on the pages. It could also be argued that paper reports are more secure than electronic reports in that they cannot be lost in cyberspace or electronically copied. There are, however, also a number of disadvantages in using paper reports. These disadvantages include the time consumed by printing and delivering these reports, especially in cases where the delivery has to be done over some distance. It should be noted that written BI reports could be disseminated not only on paper, but also on computer screens, or as a text message on mobile phones, depending on the preferences of the intelligence user. The researcher agrees with West that BI reports are typically electronically distributed (except in cases where the topic is extremely sensitive in nature) and that on receipt they are printed by the intelligence user for easy reading. In the SA banking institutions that participated in this research, written BI reports, both in printed and electronic form, are widely used as a method for disseminating intelligence.



#### 7.4.2 Verbal reporting

West (2001:171), and also Gilad and Gilad (1988:156), mention the importance of having formalized channels through which verbal intelligence reporting can take place. Kahaner (1999:135) points out that verbal presentations work best when dealing with intelligence users operating at management level. Although BI forums and face-to-face intelligence briefings usually come to mind when referring to verbal reporting, it should be noted that teleconferences and internal company video broadcasts can also be effective. The use of BI forums and BI briefings is discussed in more detail below:

- **BI forums.** Gilad and Gilad (1988:156) suggest the use of forums to discuss intelligence reports. Those attending these forums are presented with intelligence products that are then discussed and, if applicable, additions can be made to the synthesis. It is reasoned that the discussion of intelligence products also acts as a form of dissemination of the intelligence. One of the SA banking institutions that participated in this research uses this dissemination method and has established a monthly BI forum meeting. It should be noted that discussions related to these BI products should be recorded and, if necessary, the products should be updated. In fact, Gilad and Gilad suggest that such a forum discussion be followed up with a 'printed intelligence report'.
- **BI briefings/presentations.** Another typical method used for verbal dissemination is to present intelligence briefings to those intelligence users that required the BI product. This differs from the use of intelligence forums that are typically attended only by BI staff in that these briefings are presented to intelligence users and take note of users' preferences. It is not uncommon to find that written intelligence reports are summarised

7.4.3 and presented in BI briefing format before the more detailed BI report is disseminated. Intelligence briefings/presentations have several advantages, compared to written dissemination, and are often preferred as a method for disseminating intelligence when faced with time constraints. One of the main advantages is that this method provides an opportunity for interaction between the presenter (BI analyst) and the intelligence users. Another major benefit of intelligence briefings is that BI analysts can explain how they analysed and interpreted the information at their disposal. In the researcher's experience, one of the disadvantages of BI briefings is that important information/intelligence exchanged during discussions is often not captured/stored. It is also not uncommon to find that the BI briefings consist of only the visual material, and that the supporting notes/comments are not documented. During BI briefings the analyst presenting the intelligence plays a pivotal role. As Ackerman and Wickens (2001:129) point out, a lot depends on the BI analyst's ability to convey the intelligence in a format that the intelligence users can understand and use. A well-written BI report that is badly presented could result in the value of the BI product being questioned. However, the possibility also exists that an analyst who is good at presenting briefings may be able to 'sell' BI products of low quality. It is also important to note that during intelligence briefings, a situation could arise where the intelligence findings do not correspond with the views of the intelligence users. BI staff should therefore be trained to present their intelligence in a professional manner, regardless of the political climate in the briefing room. In two of the SA banking institutions that participated in this research, BI briefings are widely used, often in conjunction with BI reports, as a method for disseminating intelligence.

### 7.4.3 Electronic mail

Another typical method used to disseminate BI products is electronic mail. As Hohhof (cited in Miller,2000:137) points out, intelligence products can be disseminated by 'establishing a generic e-mail account and distributing attachments or by uploading intelligence products into an intelligence intranet site'. In order to be able to use this effectively, BI staff should ensure that all the intelligence users have the equipment required to retrieve their 'BI mail'. Typically, e-mail is used to deliver written BI products. This offers the advantage that BI products can be delivered to many intelligence users simultaneously, even though they may be geographically dispersed. E-mail is a method often used where a 'push' approach is followed to disseminate intelligence to users in accordance with their BI requirements/interests. A possible disadvantage of electronic mail relates to security issues. In this regard it is important to establish if BI e-mail did in fact reach the correct recipient and not an unauthorised person. Hohhof acknowledges this problem and notes that some BI reports require security controls such as signed and numbered copies, in which case e-mail would not be a suitable method to use. All the SA banking institutions that participated in this research uses e-mail to disseminate intelligence.

### 7.4.4 On-line access to BI products

Gilad and Gilad (1988:156) refer to this as 'access to a database where BI products and supporting information is stored'. In this case, the intelligence user has to obtain access and find the relevant BI product and retrieve or 'pull' the intelligence from the database. Although West (2001:171) refers to the use of corporate intranets and knowledge management systems to disseminate BI products, it should also be noted that online access could include access to tailored intelligence systems. All the SA banking institutions that participated in

this research provide on-line access to intelligence users to enable users to access BI products, and two of them have implemented tailored intelligence systems.

#### **7.4.5 Intelligence exhibitions**

A novel method for BI dissemination described by West (2001:172) is the use of intelligence exhibitions especially for competitor intelligence purposes. During these exhibitions, material such as competitors' marketing material, products and other relevant information are displayed. In order to disseminate intelligence on competitors, BI staff members who have knowledge of the competitors are used to man the exhibitions. None of the SA banking institutions that participated in this research has used this method for BI dissemination.

#### **7.5 *Formats for BI products***

Kahaner (1998:135) states 'not only should intelligence have all the right components, it should also be in a form that will have the biggest impact.' Various formats for BI products exist, some of which are discussed below.

##### **7.5.1 Combining formats**

Typically, intelligence output is disseminated in report and/or briefing formats. It is not uncommon to find that a BI product is disseminated in both formats to ensure that the message is conveyed to the intelligence user. In this regard, briefings are usually presented to provide intelligence users with a concise picture of the intelligence and to provide them with an opportunity to discuss the intelligence. The BI report containing more detail on the topic is also disseminated. Depending on the specific BI assignment, BI staff members may choose to present the BI briefing and disseminate the BI report simultaneously.

In some cases a BI report could be disseminated before meeting with the intelligence users, in order to facilitate discussion and questions during the briefing. In the SA banking institutions that participated in this research, both formats are used and are often combined.

### 7.5.2 Standardised formats

The different types of BI products referred to in the intelligence hierarchies (refer to paragraph 7.3) typically have a standardised report layout/format. Using standardised formats for both BI reports and BI briefings can assist the dissemination process in that it provides a clear structure for the communication of the content of the product. It is especially the use of specific/standard headings in reports and briefings that is useful in this regard. Headings such as 'Facts', 'Relevant facts', 'Interpretations', 'Implications' and 'Suggested course of action' can prevent factual components of BI products from being distorted by assumptions and the interpretation components of a product. Herring's description of analytical alerts (paragraph 7.3.3.1) provides a typical example in this regard. Another advantage of standard intelligence product formats is that intelligence users become familiar with the various formats of BI products, which can assist with the communication of the content. It should be noted that personal preferences of intelligence users could require that standardised formats be changed to ensure successful dissemination. All the SA banking institutions that participated in this research make use of standardised BI product formats, some of which can be adapted to suit the requirements of intelligence users when needed.

### 7.6 A five-step dissemination process

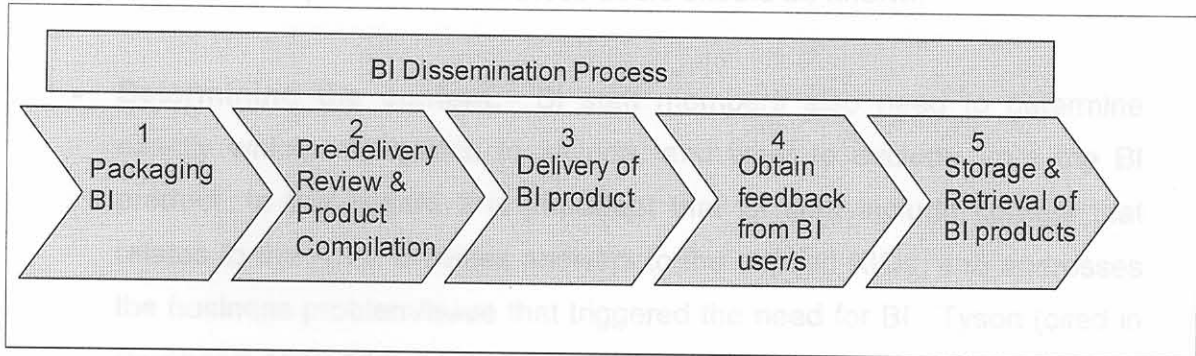
In order to support effective BI dissemination in SA banking institutions, a process consisting of five steps could be considered. This process can be depicted as follows:

### 7.5.3 Formats to assist with visualization and digestion of content

It is important that intelligence users should be able to visualize an 'intelligence picture' when dealing with BI reports and briefings. This visualization assists intelligence users to understand and digest the content of BI products. In this regard McGonagle and Vella (1993: 291) advise that tables and graphs be used. Especially in banking institutions where financial comparisons are often made, a report/briefing format using tables and graphs is more suitable than the use of paragraphs. In cases where geographic locations form an important component of a BI product, maps should be used. At one of the banking institutions that participated in this research, an in-depth quarterly analysis of competitor banking institutions is performed, using an intelligence briefing format. In these briefings, which can consist of up to 50 slides, visualization is important and tables and graphs are liberally used. Tyson (cited in Bernhardt, 1993:116) also uses tables to present a number of BI reports, including the monthly news bulletin, the strategic impact worksheet and the monthly intelligence briefing, as discussed in paragraph 7.3.3.2. In the researcher's opinion, the table format may not be suitable for dealing with intelligence report content that requires more detailed description. The researcher doubts that intelligence users would prefer to work through a document containing several rows of information grouped under table headings, which could fragment the intelligence and requires the intelligence user to synthesise all the fragments. The researcher is of the opinion that the format suggested by Herring for intelligence reports and analytical alerts would be more suitable to disseminating intelligence.

### 7.6 A five-step dissemination process

In order to support effective BI dissemination in SA banking institutions, a process consisting of five steps could be considered. This process can be depicted as follows:



**Step 1: Packaging.** The purpose of this step is to ensure that the intelligence produced during the analysis stage of the BI process is suitably packaged for use by the intelligence user/s. The packaging step involves a number of tasks, which include the following:

- **Review initial BI requirement.** BI staff should refer back to the BI requirement as defined during the first stage of the BI process. One of the reasons for doing this is to focus the effort of BI staff on addressing the defined BI requirement. Another reason is to determine whether specific dissemination requirements were defined. During the third step of the requirements definition process (see paragraph 4.5), specific guidelines for the format of the BI product and the delivery dates should be obtained. As Tyson (cited in Bernhardt,1993:103) points out, 'every user ... wants their intelligence reported according to their specifications'. It is therefore important to identify the specific dissemination requirements and preferences regarding the format, length, content and method of delivery. If no specific guidelines were determined during the BI requirements definition process, BI staff should attempt to discuss the different formats and delivery options with the intelligence users. In cases where BI staff

members provide intelligence products to intelligence users at regular intervals, the preferences of these users should be known.

- **Determining the content:** BI staff members also need to determine exactly which intelligence to include, and what to exclude from the BI product. In this regard it is important that BI staff include content that relates to the KITs, provides answers to the defined KIQs, and addresses the business problem/issue that triggered the need for BI. Tyson (cited in Bernhardt,1993:104) refers to this as 'identifying the essential information'. It is critical that the intelligence report provide answers to the KIQs that were defined during the BI requirements definition process. In cases where KIQs were not well defined, BI staff should focus on the 5xW questions (see paragraph 4.5). Tyson (cited in Bernhardt,1993:120) also confirms the need to address the 5xW questions in BI products. It is important that the content be clearly linked to the BI requirement. Especially when dealing with strategic BI reports, the focus should be on relating the content to the strategic plans of the organisation. In cases where the BI requirement relates to a specific business decision to be made, the content needs to be related to that specific decision. For those intelligence users who require detail, BI staff would need to include more facts in the content than they would for those who prefer summarised reports. Ultimately the content should be relevant, accurate, complete yet concise, and should be directly address the BI requirement.
- **Determining the format.** By reviewing the BI requirements as a first step in this process, specific guidelines for the format of BI output may have been pre-determined. Typically, these guidelines would relate to whether the intelligence user requires the intelligence in a specific report format or intelligence briefing, and what the length of the product should be. It



should be noted that during the requirements definition stage of the intelligence process, no intelligence/content has yet been produced and therefore the choice of format may change once the content has been generated. After determining the content and using the pre-defined/required format as a guideline, BI staff should determine which format is most suitable for packaging the content. It should be noted that where BI staff find that the pre-determined format would not be suitable for packaging the content, the intelligence user should be consulted and notified that another format would be more suitable. Although standard formats can assist BI staff members to package content, and intelligence users to digest the contents, these formats should be adapted when the contents requires this.

- **Determining the method of delivery.** Typically, BI products are delivered through means of verbal, written or other forms of visual communication. In cases where the preferred method of delivery was not determined during the BI requirements definition stage of the BI process, intelligence staff should establish if the intelligence user has specific preferences before deciding on a method of delivery. It should be noted that there is a link between the format of the BI product and the method of delivery. A BI briefing consisting of slides with mainly bullet points and diagrams should preferably be delivered through verbal and visual communication. Although such a briefing could conveniently be delivered by electronic mail to the intelligence user, the most suitable delivery method would be one where the BI analyst gives a presentation to the intelligence user, discussing each of the slides. When the output format is an intelligence report, it would be more suitable to distribute the document for intelligence users to read than to discuss it verbally with them.

- **Compiling the first draft.** Having determined the content, the most suitable format and delivery method, BI staff can compile the first draft version of the intelligence product in the determined format. According to Ackerman and Wickens (2001:131), it is important for BI staff to be able to place themselves in the shoes of the intelligence user and to try to anticipate questions and arguments that could arise when the product is disseminated. Tyson (cited in Bernhardt,1993:120) agrees with this view when he says, 'as the intelligence report is written, the writer must raise and answer questions until there are no questions left'. When compiling intelligence reports, Tyson (cited in Bernhardt,1993:115) suggests using the 'inverted pyramid method'. This method is well suited to intelligence reports as emphasis is on structuring the report 'top down'. This implies that the key intelligence message or synthesis is stated initially in the report, and is followed by a discussion of all the supporting thoughts and relevant information. As Tyson points out, this method is similar to the writing style used by journalists when they compile newspaper articles, with the key message being conveyed in the first few paragraphs of the story. It is also extremely important that the factual content of a BI product should be clearly distinguishable from assumptions and interpretations made by BI staff. This should be done in order for intelligence users to review the interpretation made by BI staff in the context of the factual information used in the product. This provides an opportunity for intelligence users to question the analysis and synthesis of the BI analyst.

**Step 2: Pre-delivery review and final product compilation:** The purpose of this step is not to delay the dissemination process, but to act as a checkpoint for the accuracy and relevancy of the draft BI product, and to add value to the draft BI product through enhancements. Typically, the review also includes some discussion of the report and the editing of the BI product if required. It should be

noted that this is an iterative process, involving the BI analyst responsible for compiling the BI product and those that review and suggest changes. The intelligence forum concept, as suggested by Gilad and Gilad (1988:156), can be used to good effect as a review meeting consisting of BI staff members that can review the BI report and add comments or other input. With reference to research conducted by the CIA, Ackerman and Wickens (2001:131) state that a product review is a crucial step for effective dissemination, and that this can add value to the draft BI product. According to these authors, the CIA concluded that a review process was not only crucial to ensure the quality of their intelligence products, but that it also improved the standard of analysis and report compilation skills of analysts. The key to successful review is to have experienced BI staff members review all draft products before they are delivered. Provided that the reviewers have the necessary background, they can review and question the content and interpretation of a BI product. It should be noted that the complexity of the BI requirement could determine how intensive the review should be done. When dealing with complex BI requirements of strategic significance, the review process would typically be more intensive than when dealing with a weekly current intelligence report. It should furthermore be noted that the review step could also serve to ensure that the latest relevant information is not excluded from BI products, as new information could become available during the process of compiling a draft BI product.

Ackerman and Wickens (2001:131) suggest that during the review step, BI staff should ask themselves the following questions:

- Will the intelligence user be able to make a sound decision based on this BI product?
- Will this BI product address the BI requirement and the underlying business issue/problem?

- Having confirmed the previous questions, the final and probably most important question to ask is whether the intelligence contained in the product is actionable or not.

It is also important to ensure that BI products include the latest (relevant) information available. It is of little use to deliver BI products to intelligence users who have already had access to more recent information, which is not included in the BI product. Especially in the case of current intelligence products there should be much more emphasis on managing the time that has elapsed between receiving and analysing information and the dissemination thereof, as these intelligence products are aimed at providing intelligence users with near real-time intelligence. After having completed the pre-delivery review, changes/enhancements to the draft product can be made, after which the product can be delivered to the relevant intelligence users.

**Step 3: Delivery of BI product:** During the delivery step, BI staff provide the BI product to the intelligence user. This step involves the communication of the intelligence output to the right people at the right time. Although verbal communication is considered by many to be the most effective method, it should be noted that there are several ways of conducting this (as discussed in paragraph 7.4).

**Step 4: Obtaining intelligence user feedback and follow-up:** Having delivered the BI product during the preceding step, BI staff members need to obtain feedback from intelligence users as to the actual value of the BI product, in other words, they should determine whether the BI requirement has been sufficiently addressed for the intelligence user to deal with the business issue that gave rise to the need for BI. Typically, the delivery method used during the dissemination process will determine the most suitable method to use to obtain

this feedback. In the case of BI briefings presented to intelligence users, this feedback can be obtained during or after the presentation by requesting the intelligence users to provide their feedback verbally, or by completing a feedback form after the briefing. When delivering BI reports (paper based and in electronic format), a BI feedback form to be completed and returned by the intelligence users should be attached to the report. Regardless of the delivery method used, BI staff must ensure that they obtain feedback from users as part of a quality control procedure. The value of this step cannot be overemphasised, as it not only provides an opportunity for users to confirm whether the BI products they received addresses their needs or if they require additional intelligence, but also creates an opportunity for new BI requirements to be identified (also refer to Chapter 4). Farrell (2001a-online) refers to this step as the 'disengagement' phase of the intelligence process and suggests that BI staff use the intelligence user's feedback to reflect and to identify ways to improve the process. (Also refer to paragraph 3.5.3)

#### 7.7 Guidelines for successful dissemination

Ackerman and Wickens (2001:124) take this a step further and emphasise the importance of providing assistance to intelligence users after delivery, as these users may have questions or might need advice before making a decision.

**Step 5: Storage/organisation and retrieval of BI products:** The final step in the dissemination process is to ensure that BI products are stored in a manner that will ensure easy retrieval. In banking institutions BI products are generally stored in electronic format in a database. Before storage, the information needs to be organised in logical structures. It is important to note that for BI product a centralised database is preferable to a dispersed database. Gilad and Gilad (1988:135) refer to this as a type of system where 'only complete intelligence reports...are available'. This implies that the underlying information and knowledge results of the analysis/synthesis process are not stored in this specific

database, but are stored separately for use by BI analysts. It should be noted that in some cases it might not be feasible to store complete BI products in an electronic format, especially where very large format graphic material is used (e.g. a very large map or marketing posters of competitors). In such cases a reference should be made on the database to the location where 'large format' media are stored. Another important requirement with regard to a central repository/database for BI products is that version control must be exercised and that access to the database must be managed through an appropriate security system using access profiles. Typically, only BI staff would be able to store products and determine the access profiles on such a database. In addition to being a storage and retrieval facility for BI staff, Gilad and Gilad (1988:135) point out that this database also 'serves as a vehicle for dissemination', since access to it allows intelligence users to 'pull' already produced BI products as and when required.

### **7.7 Guidelines for successful dissemination**

The process of disseminating BI products as described above provides five logical steps that BI staff of banking institutions can follow in order to disseminate their BI products. In addition to following this step-by-step process, it is important to take note of a number of guidelines developed by intelligence practitioners for the successful production and dissemination of BI products. These include the following:

- **Address the BI requirement with actionable intelligence.** One of the main reasons for referring back to the BI requirement during the first step of the dissemination process is to remind BI staff of the reasons for conducting all the previous stages in the intelligence process. Although reference was made to this on two occasions (Steps 1 and 2 of the dissemination process), the defined BI requirement serves as a reminder

of the underlying purpose of the whole intelligence process. Therefore the BI product must contain relevant and accurate intelligence content in an applicable format in order to facilitate the use of BI products by intelligence users. Kahaner (1998:134) maintains that to achieve success during the dissemination process, BI products must be responsive to management needs and be focussed and not general in nature. Stanat (1990:153) states for intelligence to be useful, it needs to be actionable. Tyson (cited in Bernhardt,1993:114) also emphasises the importance of 'decision-orientated information'. In order to make BI products more actionable, BI staff should ensure that the BI product includes answers to the KIQs. Furthermore, if the BI requirement is linked to a decision to be made, then the BI product should include different options for the intelligence user, as well as recommendations and advice regarding a particular decision or course of action. This does not imply that BI staff will make decisions on behalf of the intelligence user, but that BI staff aim to make the BI product as actionable as possible.

- **Assist the intelligence user with his/her process.** After delivering the BI product, BI staff should not necessarily see their task as completed, as it is up to the intelligence user from that point onwards to make a decision and take action. Chances are good that the intelligence user will need further assistance and will have more requirements, which BI staff can assist with.
- **Ensure accuracy.** Analysts must verify the accuracy of the information contained in BI products in order to ensure that BI products have what Kahaner terms ' a high trust level'. Although the verification process of the previous stage of the intelligence process, as described in Chapter 6, is specifically aimed at this, the pre-delivery review step of the dissemination

process should also include some quality control. As Ackerman and Wickens (2001:124) point out, 'this does not guarantee that no inaccurate intelligence will be produced and disseminated. In cases where unconfirmed information is included in an intelligence product, it must be specifically pointed out to the recipient'. Inaccurate BI products can lead not only to faulty decisions, but could also damage the trust level of executives in the whole BI programme.

- **Ensure timeliness of BI products.** Whilst it is important that care should be taken to ensure that quality intelligence products are compiled, reviewed and professionally presented/delivered, it is equally important that BI products be delivered when they are needed to add value to intelligence users. Both Stanat (1990:153) and Kahaner (1998:134) make specific mention of the need for timeliness when disseminating BI products. Stanat states that BI reports are useful only if they are disseminated at a time when they will be useful to intelligence users by enabling them to make proactive business decisions. Ackerman and Wickens (2001:125) confirm that 'excellent intelligence too late has very little value, mainly because it is too late to make a decision and take action'. In this regard it is important to ensure that the time that passes between the interpretation of intelligence in the previous stage of the intelligence process and the dissemination stage be kept as short as possible. This is necessary in order to prevent a situation where the BI product becomes 'outdated' before dissemination, owing to the flow of new information.
- **Promote conciseness.** BI products should be kept as focussed and as brief as possible, without omitting essential intelligence items. The key is not to include all the detail required to substantiate the BI product, but to provide a



clear and concise message that has factual support. Tyson (cited in Bernhardt, 1993:104) refers to this as the inclusion of only relevant supporting data. This does not imply that an intelligence product consisting primarily of recommendations/advice or predictions can be disseminated without the inclusion of facts. In the researcher's experience, intelligence users need to understand the factual base on which the interpretation is based. Thus it should be common practice to refer to key facts and relevant facts, and to indicate which component of a BI product contains the interpretation and recommendations and/or predictions.

## **7.8 Conclusion**

Because of the importance of the dissemination stage for the successful completion of the BI process, BI staff should take cognisance of the different approaches, methods and formats suggested in the literature and should consider using a combination of these in a step-by-step process to disseminate BI products to the organisation's intelligence users.

In deciding on the appropriate combination, BI staff members should ensure that the chosen products, format and methods would assist in addressing the BI requirements of intelligence users and lead to BI products being disseminated in the most effective manner.

The execution of a step-by-step dissemination process that emphasises the appropriate packaging and quality assurance of BI products before delivery can assist BI staff in providing the right intelligence product to the right person in the correct format exactly when and where it is required. Failure to properly execute this process, taking cognisance of the criteria for successful dissemination, could lead to a situation where BI products are disseminated, but not necessarily acted upon by intelligence users, which could result in the failure of the BI assignment.

Ultimately, the success of the whole BI process is measured in terms of whether or not the intelligence disseminated was used and, if so, what the impact of its use was in terms of the organisation's business performance.

### 3.1 Introduction

By successfully completing the dissemination stage of the intelligence process and enabling intelligence users to take action on intelligence products, BI staff could find themselves back at the first stage of the BI process, having to deal with new BI requirements. This situation arises mainly because, as Kahaner (1998:136) states, 'whatever action is taken as a result of intelligence will present new requirements and needs. After all the company's status will change based on new actions that will be taken'.

#### 3.1.1 Introduction

The aim of this chapter is to provide a summary of the researcher's key findings regarding the research problem and sub-problems, as identified in the first chapter of this dissertation.

The first section of this chapter deals with the researcher's findings relating to the research problem and corresponding research objectives, as outlined in Chapter 1. In this regard the researcher provides a brief summary of the research objective and research findings contained in Chapters 2 to 7 of the dissertation. Where applicable, the researcher made recommendations and suggested practical steps to be considered for BI assignments in SA banking institutions. In the second section of this chapter the researcher identifies topics for further research.