

# COMPETITIVE INTELLIGENCE CHALLENGES FACED BY SOUTH AFRICAN PHARMACEUTICAL COMPANIES

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## ABSTRACT

The purpose of this article is to determine the current situation regarding the South African pharmaceutical industry's competitive intelligence (CI) capacity. Questionnaires were sent to senior managers in the industry. Respondents confirmed that CI is used on a continuous basis in strategic decision-making while the majority of respondents acknowledged a partial CI portfolio in the industry. Staff attending conferences and was the most popular primary source and trade literature the most popular secondary source. Blind-spot analysis is seldom used as an analysis method and this is a concern, as it is part of the analysis toolkit necessary to glean intelligence.

**Keywords:** Competitive intelligence, pharmaceutical industry, South Africa

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## INTRODUCTION

Globalisation is the new currency that is driving innovation and market changes. The current South African government has identified the domestic pharmaceutical industry as an area for growth. Since South Africa is recognised as a global contender for industrialisation, the use of competitive intelligence (CI) as a strategic tool by the South African pharmaceutical industry is necessary. CI in the last decade has emerged as an ethical and legal business tool from within the field of information management. Its modus operandi is the gleaning of information on competitors, using the skill of analysis that can be transcribed into meaningful intelligence (Badr, Madden & Wright 2006). Informed customers frequently prefer non-pharmaceutical companies with healthcare products. These customers make use of their purchasing power and actively make choices that are more cost-effective to their pockets, by accessing the Internet for information before confirming their purchases. At the same time, national health services experience economic constraints and are increasingly demanding cost-effective medicines and healthcare. This article focuses on the challenges South African pharmaceutical companies face and whether they use CI as a business tool.

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## COMPETITIVE INTELLIGENCE

McGonagle and Vella (2002) define CI as:

- The use of public sources to develop data (unprocessed facts) on competition, competitors, and the market environment; and
- The transformation, by analysis, of those data into information (usable results) able to support business decisions.

Evans (2005) views CI as integrated knowledge, namely CI = C<sup>3</sup>: collecting data; converting it through analysis into meaningful information and communicating it. Correia (2003, p. 1) makes an important comparison between business intelligence and CI, namely “Unlike business intelligence, which has become a catch-all term that companies like IBM use to describe data mining and activities involving business information, CI involves competitive analysis and examines competitive forces within one’s industry.” For the purpose of this article CI is the use of the tools of analysis and understanding of the competitive environment to convert data into actionable intelligence, ultimately making strategic decisions more accurate.

## COMPETITIVENESS IN THE PHARMACEUTICAL INDUSTRY

The international pharmaceutical industry has always been a very powerful economic force until 2008, when global financial climates became less favourable and investors sought other asset markets. For example, biotechnology had begun earlier on to attract finance from new investors. Taggart cited in Badr et al. (2006, p. 18) argues that “the modern day pharmaceutical industry ... is highly fragmented.” The industry was surprised by the appearance and dynamism that biotechnology offered. Its potential resulted in the “many mergers and linkages which characterize the industry” today.

The pharmaceutical industry has been experiencing major shifts since 2008. Henderson (2011, p. 35) states that, “the past decade has not been kind to the pharmaceutical industry. While many of its biggest blockbusters stating anti-depressants and painkillers have drifted out of patents, others have been forced off the market by serious side-effects with health services driving a harder bargain than ever and the cost of research and development pushing £630 million (\$1 billion) for every new drug.” Health services are experiencing financial constraints and are increasingly demanding cost-effective medicines and healthcare products. Likewise non-pharmaceutical companies informed customers frequently to prefer non-pharmaceutical companies with healthcare products which are cost effective. Cloud (2011, p. 40) comments on the nutraceutical market, it “is growing so fast among aging boomers that even giant food and drug companies are stumbling as they attempt to maintain their position.”

According to Wright, Fleisher and Madden (2008), the pharmaceutical industry needs to maintain its position by keeping abreast of all decisions influencing factors, including competitors. Astra Zeneca was one of the few pharmaceutical companies that had devised a fully integrated early warning system concerning the impact of biotechnology on the industry (Badr et al. 2006, p. 19). Furthermore, Fuld (2004), cited in Badr et al. (2006, p. 19), states that the “frenzy surrounding the provision of AIDS drugs to Africa” was due to “the inadequacies of CI function in many leading pharmaceutical companies.”

The benefits of using CI in the pharmaceutical industry can be considered to mitigate the threats, risks and opportunities, which are now more evident since 2008. Gray (2008) argues that new hurdles exist. What is important is no longer efficiency, safety and quality, but what constitutes value in healthcare and the importance evidence plays. First-world patients demand to be told the facts so that they can make informed decisions about their health. They want value for money and to be aware of clinical side-effects that they might experience when agreeing to medical treatment.

What was deemed to be the international global pharmaceutical industry's established territory is no longer guaranteed, despite acquisitions and mergers. Gilad (2011) refers to Andrew Witty, CEO of Glaxco, Kline and Smith Pharmaceuticals (GKS) as a case in point. Witty has charted a new strategy at de-risking his company, replacing large profits with more stable earnings. GKS researchers are reported to be looking for more drugs with small or potential markets and pushing into emerging markets. Gilad furthermore concludes that Witty uses gleaned intelligence to adopt unique strategies, thereby electing no longer to imitate other pharmaceutical companies.

## **CHALLENGES FACING THE SOUTH AFRICAN PHARMACEUTICAL INDUSTRY**

The South African pharmaceutical industry is undergoing rapid transformation spurred on by the current economic climate, government policy and an evolving local existing customer base. Also within this cauldron of factors is the dominating framework of globalisation. South Africa, like many developing countries, needs to embrace an open-market economy to develop competitiveness which, in turn, will enhance its competitiveness to improve living standards (Blanke 2007). South Africa as a developing country needs successful pharmaceutical ventures. This is the field where most medical research is needed and where less stringent regulations, manufacturing and trials are more easily implemented i.e. the biotechnology industry (Montague & Oosthuizen 2010). South Africa imports 70% of its pharmaceuticals. These imports fuel the price, especially when the rand weakens in reaction to global markets.

In promoting training and capacity building in health research, the South African government invested funds "to use research, development and technology transfer," [for the health of its population] "through institutions like the Medical Control Council" (Ndhlovu 2007, p. 2). However, such noble sentiments have to date not been put into practice despite "the huge investment in time, financial and human resources" that was made available to develop the South African pharmaceutical industry (Ndhlovu 2007, p. 4). Furthermore, Thom (2010, p. 1) criticised the activities of the Medical Control Council: "South Africa's beleaguered Medicines Control Council is slowly starting to make inroads into its massive backlog; however it will take a long time to repair the damage done by years of political meddling and incompetence."

The Fund for Research into Industrial Development Growth and Equity (FRIDGE) report discusses some of the challenges the pharmaceutical industry has encountered. Significantly negative aspects which have capitalised on the pharmaceutical industry's growth, have been the issues of globalisation and restructuring "affecting the South African industry severely slashing employment to half that in the 1980's" (FRIDGE report 2000, p. 167). Secondly, the manufacturing industry was "in crisis with declining investments, legislative and regulatory

chaos, plant closures” (FRIDGE report 2000, p. 177). Thirdly, many companies started to look at offshore manufacturing to ensure survival (FRIDGE report, 2000). Fourthly, “although South Africa is a small and not very wealthy market, it has a general inability to achieve economies of scale in production” (FRIDGE report 2000, p. 168). To put it more meaningfully, “production runs are short for the local market and with only higher inputs current production would claim higher unit costs” (FRIDGE report 2000, p. 111).

According to Kaplan and Laing (2005) local production of pharmaceuticals in a developing country should not produce medicines domestically from a policy and public health viewpoint. Further criticism from the FRIDGE report warned that already by the year 2000, over 30 companies had closed plants over the past five years due to downsizing/rationalisation/mergers and imports, as well as medicines approval times (FRIDGE report 2000). In 2000 the FRIDGE report stated that there were 79 manufacturing sites with less additional packaging sites (FRIDGE report 2000). In 2012 “only 10 of the 94 pharmaceutical firms registered in South Africa have production facilities here” and they import the bulk of their raw inputs, as few local firms produce the necessary active pharmaceutical ingredients (API) (Kahn 2012, p. 1).

In order for the pharmaceutical industry to compete globally, the value chain and business strategy need to be addressed. The FRIDGE report confirms that business strategy is crucial, as the pharmaceutical manufacturing industry becomes more vulnerable with the growth of imports and the decline of the rand (FRIDGE report 2000). The manufacturing of drugs is an expensive business. The pharmaceutical industry itself is highly competitive, driven by the need to innovate and discover new, expensive drugs. The time span of 20 years to discover and market a new drug is an added reason why multinationals have unique CI challenges. By becoming more globalised, multinationals can reduce their dependency on local markets where competition has increased, especially in the pharmaceutical industry. Global markets offer a better return on investments. In particular, the global affluent ageing populations with higher disposable incomes are an enticement to multinationals, which have to contend with the current South African government’s decision to give business to foreign manufacturers that offer donor-funded discounts (RNCOS Industry Research Solutions 2011).

Seemingly the current characteristic of the South African pharmaceutical industry is to encourage multinationals to keep their bases on South African soil, as this is where the huge disease burdens occur, for example diabetes, TB, high blood pressure and HIV/Aids. They could expand globally to gain a profitable return on their investments, but keep their options open in the hope that new government regulations, economic and political agendas will become more favourable. Notably the incidence of clinical trials for HIV/Aids is significantly lower than in other countries (Montague & Oosthuizen 2010), providing further reason for multinationals to continue doing business in South Africa.

The South African local pharmaceutical manufacturers have opportunities, but problems outlined earlier in this article make progress very slow and prevent it from successfully implementing business strategies, which in turn affects decision-making. There have been some deals with like-minded companies while extending their reach into Africa, Brazil and Asia, while the focus on China and India has helped the local industry to weather unfavourable local trading markets.

The four main listed companies, Cipla Medpro, Adcock Ingram, Aspen and Litha Healthcare, continue to jockey for position in the global and local markets in an oversubscribed

competitive industry. Cipla Medpro India took over Cipla Medpro South Africa in May 2013 and Cipla Medpro South Africa was delisted from the Johannesburg Stock Exchange (Cipla to delist on shareholder buyout nod). The other three large South African pharmaceutical companies try to implement government policy in terms of transformation, skills training, revised labour laws and upheavals, while dealing with other issues such as political meddling. They are finding such complexity challenging, when problems need to be solved strategically in order to satisfy profit margins and yet accommodate government policies. A marketing investment and trade promotion agency, WESGRO Publications (2012, p. 1) cited a 2011 Business Monitor International (BMI) report on the South African pharmaceutical industry in its market research. Its views were that the current pharmaceutical industry is “mostly focused on the production of generics, including manufacturing copy drugs under licence.” The rational explanation is “an increase in demand for generic prescription drugs in conjunction with the slowing demand for prescription brand drugs.” Consumers who want cost-effective medicines are setting the trend. Within the manufacturing section of orthodox medicines, the international, established companies with their headquarters abroad are holding their own. International companies GKS (UK), Sanofi Aventis (France), Bristol Myers Squibb (US) and Johnson & Johnson use South Africa as a base from which to reach other African markets further north (WESGRO Publications 2012). Despite South Africa having this competitive advantage, the local industry, although some companies have partnerships with these international players, still has to contend with the questionable tender system. WESGRO Publications (2012, p. 1) concurs that “tendering for the public sector is competitive, particularly on price.” Government policy compels “state organisations to buy some drugs exclusively from domestic suppliers” (WESGRO Publications 2012, p. 2).

## **NEED FOR CI IN THE SOUTH AFRICAN PHARMACEUTICAL INDUSTRY**

All global economies are in a state of flux, constantly evolving to accommodate change, risks and opportunities as their markets develop and subside. The global economy thrives on competition and for an organisation to become a market leader, it needs to remain competitive. In order to leverage this objective, Strauss (2008, p. 11) asserts that CI is “a tool that transforms information into actionable intelligence that, if used in strategic decision-making, could enhance an organisation’s competitiveness.” Adding this, Gilad (2011, p. 4), while criticising global competitiveness, states that “studies attribute between 35 per cent and 55 per cent of all business failures to strategic blunders.”

According to Montague and Oosthuizen (2010), the South African government intends to transform the country’s economy, to become more knowledge-based. The Department of Science and Technology has a ten-year plan to accelerate and implement this aim. The pharmaceutical industry has been identified as a growth sector and is reportedly set to become a meaningful participant in the global pharmaceutical industry by 2018 (Montague & Oosthuizen 2010).

Heppes and Du Toit (2009) state that CI in South Africa is not yet at a level of that in countries such as the US, Australia, Japan, France and Canada. CI has not gained full recognition yet and clearly needs to be elevated to a higher level of implementation to gain value, which is a necessary asset in company strategy. Heppes and Du Toit (2009) posit that competing in the global economy is fraught with numerous risks and competitive challenges. Consequently CI is a much needed business tool required to monitor the different aspects of competitiveness. Besides CI being evaluated as a business tool to create competitive

advantage and enhance competitiveness, Viviers, Muller and Du Toit (2005) endorse its enormous value in companies that are enabled to anticipate and plan to exploit market developments rather than merely react to them.

Van Wyk (2011) states that: “Today’s red hot competitive market place requires organisations to constantly adjust to a rapidly changing world where knowledge becomes easily outdated because of innovation.” Viviers *et al* (2005) further attest to the importance of CI being used as an instrument to promote competitiveness in the wide competitive landscape. It would seem that South African companies, after 1994, have begun to see the merit of CI as they gradually penetrated competitive global markets that have welcomed them back into the global fold. They have realised too, that knowledge and information are fundamental to economic growth (Du Toit 2003).

When organisations start considering CI as an important business asset to help them penetrate and hold their current positions in the global economy, they should consider the long- and short-term benefits. In a developing country such as South Africa, the local pharmaceutical industry needs to compete in highly dynamic international markets. Local pharmaceutical manufacturers can ‘think smart’ when competing with resident multinationals who have their CI functionality assessed at headquarters in their mother countries, i.e. GKS. Since 2008, under the leadership of Andrew Witty, GKS has started charting a new strategy aimed at replacing large profits with more stable earnings (Gilad 2011). This kind of unique business model necessarily had a major impact on other shareholders in the pharmaceutical industry. A successful South African enterprise, Aspen Pharmacare, has in recent years penetrated international pharmaceutical markets. Although CI has helped to yield some positive returns in the pharmaceutical industry, it has not always yielded the expected results. Research by Wright *et al* (2008, p. 12) refer to the traditional strategic frameworks used by some pharmaceutical companies, which manage their threats, risks and opportunities poorly. They focus on brand and fixed assets. The researchers’ findings suggest that any European firm needs to put the same effort into “developing sophisticated and robust approaches to its intellectual assets as it does its brand and fixed assets.”

Gray (2008) argues that new hurdles exist in the pharmaceutical industry. What is important is no longer efficiency, safety and quality, but what constitutes ‘value’ in healthcare and the importance evidence plays. First-world patients demand to be told the facts so that they can make informed decisions about their health. They want value for money and to be aware of clinical side-effects that they might experience when agreeing to medical treatment. CI’s chief benefit to any organisation is its ability to monitor a company’s competition within the industry and the wider market continuously. This is currently of great importance as there are opportunistic firms that have penetrated the traditional, monopolistic pharmaceutical industry. Buck-Luce (2011, p. 1) confirms this trend: “IT firms, telecommunications companies, data management firms, internet services companies and social media sites are encroaching on the lucrative international pharmaceutical industry.”

Since 2008, South Africa, along with the rest of the modern world, has witnessed evolving business platforms where complexity, rapid change and a competitive environment co-exist. In order to grow in this new global economy, organisations tend to address the advantages of implementing CI. CI is “enhancing market place competitiveness through a greater understanding of a company’s competitors and competitive environment” (Viviers *et al*. 2005, p. 248). Furthermore, CI is more than a process; it is a product of actionable intelligence that is used to make strategic decisions. Findings by Martin (2002, p. 4) suggest

that CI in the form of a compass can assist companies to “navigate the uncharted waters ahead.” Adding to this comment, Martin (2002, p. 9) views CI as the “the bedrock of today’s knowledge based economy”, thereby justifying the reason why CI is important for South African organisations to have on their business agenda if they want to succeed in today’s global landscape. The phrase ‘agility in the new landscape’ (Martin 2002) aptly supports the premise that the global economy is demanding in every way. South African industries need to grow markets internationally because their domestic market offers limited returns on their investments and as a result of more complicated government regulations, a volatile currency and political uncertainty, profit margins are under threat.

## **EMPIRICAL SURVEY ON CI IN THE SOUTH AFRICAN PHARMACEUTICAL INDUSTRY**

### **Research Methodology**

There is no complete list of manufacturing pharmaceutical companies in South Africa, except for a list of viable current manufacturers used by retail pharmacies (MIMS 2011). Additional manufacturer’s contacts were accessed via telephone directories and the Internet and eventually a list of 68 manufacturing pharmaceutical companies was compiled. A questionnaire was used for the survey so that statistical data could be more easily analysed. This questionnaire consisted of 24 questions divided into Sections A, B, C, D and E. Section A required background information while Section B explored the respondents’ thinking on CI activities. Section C attempted to elicit the extent of CI capacity in the respondent’s company. Section D focused on analysis and interpretation of a senior manager’s use of CI as a tool to help with information analysis. Section E queried whether respondents, who used CI, could comment on the value CI adds to strategic management. The questionnaire was tested in a trial or pilot run with six different respondents involved with the medical and pharmaceutical industry. They appreciated the significance of strategic planning and knew about CI. Consequently justifiable constructive criticism was levelled at the existing questionnaire. A few minor changes were made to accommodate the valid criticism. Access to the questionnaire was via an electronic link embedded in the covering letter. The link is part of the web-based surveymonkey tool ([www@surveymonkey.com](http://www@surveymonkey.com)). It was used as a format to capture completed responses, which could be automatically submitted once each respondent had completed the questionnaire. The Statistical Consultation Service (Statkon) at the University of Johannesburg assisted with data capturing analysis, using Statistical Package for Social Science (SPSS) software. The number of questionnaires that were returned added up to 30. This gave a response rate of 44%.

### **Findings**

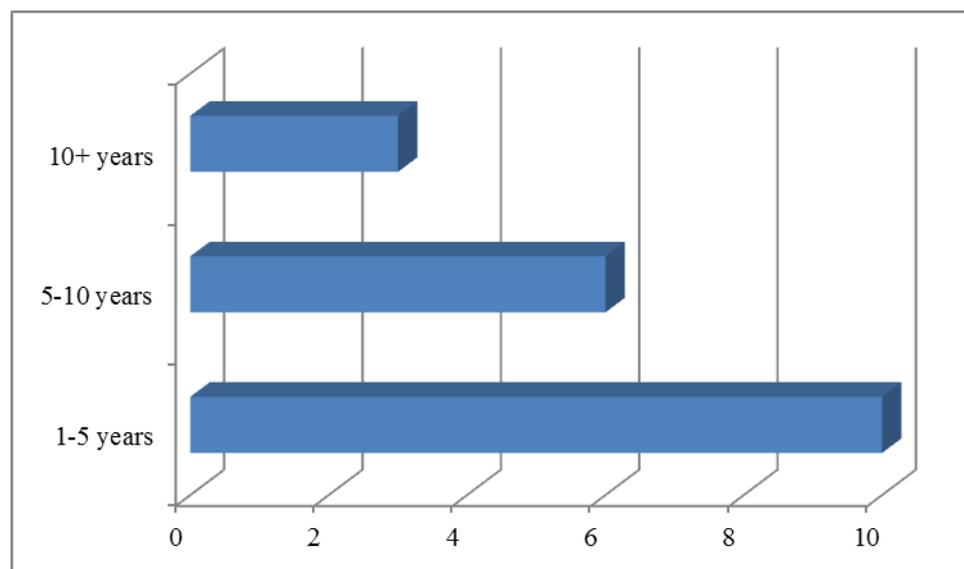
The majority of respondents were between the ages of 40 and 49 years (44.8% (13)), with 27.6% (8) respondents falling into the 30 to 39 years range and 20.7% (6) respondents in the 50 to 59 years level. The majority of respondents (30% (9)) have a post-school diploma/certificate. However, 39.9% (12) of the respondents have a post-graduate degree – 13.3% an honours degree, 23.3% a Masters degree and 3.3% a Doctoral degree. What is surprising is the high number of respondents with only a post-school diploma/certificate. This may be a potential problem area, as senior managers responsible for strategy require specialised qualifications. Current research on other companies in South Africa shows that 85% have postgraduate degrees and are in either top management or senior/middle management levels (Sewdass & Du Toit 2012). The majority of the respondents (80.0% (24))

were at top management level.

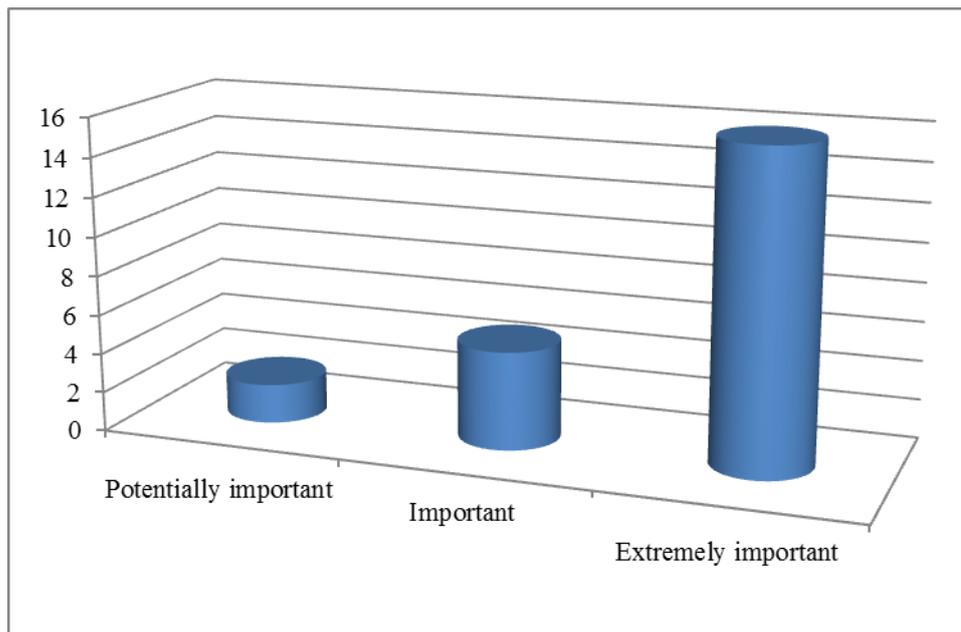
A formal CI function is only available in 42.3% (11) of the companies. Research by Sewdass and Du Toit (2012) found that 60% of the companies they surveyed had a formal CI function. The CI function has been operating in the majority of companies for less than ten years and only 23.1% (3) of respondents confirmed that the CI function has been operating in their companies for more than ten years. These findings support the research by Du Toit and Strauss (2010) that CI has been around for more than five years but less than ten years and that of Sewdass & Du Toit (2012) that the CI function has been in existence for more than five years in 65% of the companies surveyed. Four of the respondents (22.2%) acknowledge a full CI portfolio, while 66.7% (12) of the respondents acknowledge a partial CI portfolio. Only 6.7% (2) of the respondents studied CI at university or at a tertiary institution.

In Figure 1 the respondents showed their practical experience of using CI as a business tool in years, with 52.6% (10) of respondents having one to five years experience. A further 31.6% (6) had five to ten years' exposure, while only 15.8% (3) of respondents had more than ten years' experience. These findings are supported by the findings of Du Toit and Strauss (2010), who indicated that the majority of respondents had no to four years' CI experience.

**Figure 1: Years practical experience in CI**



Respondents were asked how they perceived the importance of environmental scanning to gain a competitive edge in their industry (see Figure 2). The majority of respondents (69.6% (16)) viewed it as extremely important. According to the findings of Du Toit (2003), only 43% of the companies used formal environmental scanning systems. The 69.6% mentioned above shows that there has been some improvement in the importance pharmaceutical companies using formal environmental scanning. This result suggests that the pharmaceutical industry is starting to take CI more seriously and using it to get a competitive edge.

**Figure 2: Importance of environmental scanning**

The majority of respondents (68.0% (17)) have strategies in place to manage competitors on a continuous basis. Only 32.0% (8) of the respondents answered that their company had an ad hoc competitive action team while 20.0% (5) of respondents reported on their company having a formal team. From these results one can deduce that the CI function is not being fully used in South African pharmaceutical companies. The evidence for these companies suggests that an ad hoc team has more value than a formal action team, whereas it should be the other way round. Gilad (2011, p. 4) emphasises the importance of strategy which comes from analysis, while criticising global competitiveness. He states that “studies attribute between 35 per cent and 55 per cent of all business failures to strategic blunders.” A formal CI action team would spearhead a more successful strategic planning programme to aid decision-making.

Respondents were asked whether CI capacity is used in their company to generate profit. The majority of respondents (52.2% (12)) confirmed that it is. According to Table 1, CI is often used to guide decision-making processes in 71.4% (15) of the companies. CI is often conducted in an organised and systematic way by 42% (9) of the companies, while it is sometimes used for early warning of competitive activities by 33.3% (7) of the respondents. CI is often used as early warning of emerging industry trends by the majority (52.4% (11)) of respondents and it often helps to consolidate intelligence for strategic reasons at 42% (9) of the companies. At 42% of the respondents, the CI stature sometimes affects strategic planning. This evidence shows that CI is often considered by the majority of respondents to be a worthwhile business tool to be used in the company.

Table 1: CI as used in company (the modal category for each option is shaded)

	Never		Rarely		Sometimes		Often		Always		Total	
<b>CI is used to guide decision-making processes</b>	0	0%	3	14.3%	2	9.5%	15	71.4%	1	4.8%	21	100%
<b>CI is delivered in an organised and systematic way</b>	2	9.5%	5	23.8%	5	23.8%	9	42.0%	0	0%	21	100%
<b>CI is used for early warning of competitor activities</b>	1	4.8%	2	9.5%	7	33.3%	6	28.6%	5	23.8%	21	100%
<b>CI is used for early warning of emerging industry trends</b>	1	4.8%	2	9.5%	4	19.0%	11	52.4%	3	14.3%	21	100%
<b>CI helps to consolidate intelligence for strategic reasons</b>	1	4.8%	3	14.3%	3	14.3%	11	52.4%	3	14.3%	21	100%
<b>CI stature impact on strategic planning</b>	1	4.8%	1	4.8%	2	9.5%	9	42.0%	8	38.1%	21	100%

The majority of the respondents (82.6% (19)) were aware of the key intelligence needs of senior managers in their companies. This finding shows an improvement on how companies' viewed the CEOs' needs in comparison to the findings of Du Toit (2003) in 2003 where only 21% of CI units regularly interviewed CEOs to understand their needs. The fact that 86.4% of the respondents said that they collaborate to a large or moderate extent indicates that efficient methods are used to disseminate information in the companies. Respondents were also asked about the influence of information-sharing on decision-making in their companies. The majority of the respondents (70.0% (21)) said that generally, better decisions are made. With regard to the question, 'How are details of CI held collectively by your company?' the majority of respondents (42.1% (8)) said that data were held in a database that was only available to the CI unit professionals.

According to Table 2, the most important primary sources are staff attending conferences and seminars on a quarterly basis (54.5%), employees reporting back on competitor actions on a monthly basis (45%) and members of professional trade and industry associations on a monthly basis (40.9%). Employees in competitor organisations are seldom used, indicating that the respondents use ethical ways to collect primary information. Suppliers, customers (33.3% of respondents) and distributors (26.1% of respondents) are accessed on a daily basis. Industry experts were accessed quarterly by 36.4% (8) of the respondents, which supports the finding by Sewdass and Du Toit (2012) that industry experts were an important source.

Table 2: Use of primary sources (the modal category for each option is shaded)

Source	Daily		Weekly		Monthly		Quarterly		Annually		Never		Total	
Consultants, market researchers	0	0%	0	0%	8	34.8%	3	13%	7	30.4%	5	21.7%	23	100%
Suppliers, customers	7	33.3%	5	23.8%	1	4.8%	5	23.8%	2	9.5%	1	4.8%	21	100%
Distributors	6	26.1%	4	17.4%	4	17.4%	4	17.4%	2	8.7%	3	13%	23	100%
Industry experts	0	0%	1	4.5%	5	22.7%	8	36.4%	6	27.3%	2	9.1%	22	100%
Staff joining from competitors	2	10%	0	0%	3	15%	3	15%	7	35%	5	25%	20	100%
Members of professional trade and industry associations	1	4.5%	2	9.1%	9	40.9%	4	18.2%	3	13.6%	3	13.6%	22	100%
Employees in competitor organisations	0	0%	1	4.8%	4	19%	2	9.5%	2	9.5%	12	57.1%	21	100%
Journalists	0	0%	1	4.8%	3	14.3%	7	33.3%	2	9.5%	3	38.1%	21	100%
Staff attending conferences and seminars	0	0%	1	4.5%	3	13.6%	12	54.5%	5	22.7%	1	4.5%	22	100%
Recreational social activities	0	0%	1	4.5%	4	18.2%	4	18.2%	3	13.6%	10	45.5%	22	100%
Employees report back on competitor actions	3	15%	5	25%	9	45%	2	10%	1	5%	0	0%	20	100%
Employees report back on customer needs	5	23.8%	7	33.3%	8	38.1%	0	0%	0	0%	1	4.8%	21	100%
Other	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	100%

According to Table 3, the most important secondary sources are trade literature, which is accessed monthly by 59.1% of the respondents, promotional material, which is accessed monthly by 54.5% of the respondents, information on regulatory bodies, which is accessed monthly by 50% of the respondents, and general newspapers, which is accessed daily by 50% of the respondents. Survey summaries are seldom used by the respondents. This finding is in direct contrast to a similar finding by Sewdass and Du Toit (2012) that survey summaries are accessed quarterly and monthly by South African companies. Corporate websites (accessed by 22.7% of the respondents on a monthly and quarterly basis) and industry analyst reports (accessed by 45.5% of the respondents on a quarterly basis) were not as frequently accessed, according to the findings of Sewdass and Du Toit (2012).

Table 3: Use of secondary sources (the modal category for each option is shaded)

Source	Daily		Weekly		Monthly		Quarterly		Annually		Never		Total	
Corporate websites	1	4.5%	4	18.2%	5	22.7%	5	22.7%	4	18.2%	3	13.6%	22	100%
Sales forecasts	4	19%	6	28.6%	5	23.8%	2	9.5%	1	4.8%	3	14.3%	21	100%
Operational performance data	4	19%	6	28.6%	4	19%	5	23.8%	1	4.8%	1	4.8%	21	100%
Internal financial information	3	13.6%	7	31.8%	7	31.8%	2	9.1%	0	0%	3	13.6%	22	100%
Information on regulatory bodies	3	13.6%	2	9.1%	11	50%	4	18.2%	0	0%	2	9.1%	22	100%
Customer demographics	1	4.5%	1	4.5%	8	36.4%	6	27.3%	6	17.3%	0	0%	22	100%
Information on potential business partners	2	9.1%	1	4.5%	5	22.7%	11	50%	3	13.6%	0	0%	22	100%
Research reports	1	4.5%	1	4.5%	8	36.4%	7	31.8%	4	18.2%	1	4.5%	22	100%
Trade shows & conferences	0	0%	1	4.5%	3	13.8%	11	50%	7	31.8%	0	0%	22	100%
Trade literature (journals)	1	4.5%	3	13.8%	13	59.1%	4	18.2%	0	0%	1	4.5%	22	100%
Promotional material	2	9.1%	3	13.8%	12	54.5%	3	13.8%	0	0%	2	9.1%	22	100%
Corporate annual & quarterly reports	0	0%	2	9.5%	1	4.8%	9	42.9%	7	33.3%	2	9.8%	21	100%
Industry analyst reports	0	0%	2	9.1%	2	9.1%	10	45.5%	6	27.3%	2	9.1%	22	100%
Survey summaries	0	0%	0	0%	2	9.5%	5	23.8%	8	38.1%	6	28.6%	21	100%
Market research reports	1	4.5%	0	0%	6	27.3%	9	40.9%	5	22.7%	1	4.5%	22	100%
Specific government literature	1	4.5%	2	9.1%	7	31.8%	8	36.4%	3	13.6%	1	4.5%	22	100%
General newspapers	11	50%	5	22.7%	3	13.6%	0	0%	0	0%	3	13.6%	22	100%
Other	0	0%	0	0%	0	0%	0	0%	0	0%	1	100%	1	100%

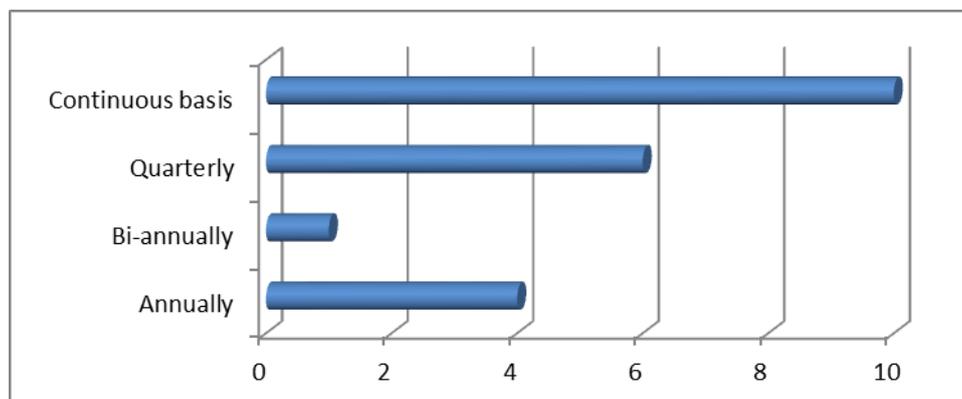
Table 4 shows that the respondents often use industry analysis (59.1% of respondents), GAP analysis (57.1% of respondents) and benchmarking (54.5% of respondents) to analyse and interpret data. Only 31.8% of the respondents always use SWOT analysis, while the sophisticated methods Porter's<sup>TM</sup> Four Corner model and blind-spot analysis are seldom used by the respondents.

**Table 4: Analytical methods/models used (the modal category for each option is shaded)**

Method/Model	Never		Rarely		Sometimes		Often		Always		Total	
<b>Benchmarking</b>	2	9.1%	1	4.5%	6	27.3%	12	54.5%	1	4.5%	22	100%
<b>Porter's<sup>TM</sup> four corner model</b>	8	38.1%	8	38.1%	1	4.8%	4	19%	0	0%	21	100%
<b>Blind-spot analysis</b>	7	33.3%	7	33.3%	4	19%	2	9.5%	1	4.8%	21	100%
<b>Competitor analysis</b>	1	4.5%	2	9.1%	3	13.6%	10	45.5%	6	27.3%	22	100%
<b>GAP analysis</b>	2	9.5%	1	4.8%	3	14.3%	12	57.1%	3	14.3%	21	100%
<b>Industry analysis</b>	1	4.5%	0	0%	4	18.2%	14	59.1%	4	18.2%	22	100%
<b>Macro-environment (STEEP) analysis</b>	3	14.3%	3	14.3%	6	28.6%	7	33.3%	2	9.5%	21	100%
<b>Patent analysis</b>	5	22.7%	3	13.6%	6	27.3%	7	31.8%	1	4.5%	22	100%
<b>Scenario analysis</b>	3	13.6%	4	18.2%	5	22.7%	8	36.4%	2	9.1%	22	100%
<b>Strategic group analysis</b>	4	18.2%	4	18.2%	4	18.2%	9	40.9%	1	4.5%	22	100%
<b>SWOT analysis</b>	1	4.5%	1	4.5%	3	13.6%	10	45.5%	7	31.8%	22	100%
<b>Value chain analysis</b>	4	20%	3	15%	3	15%	7	35%	3	15%	20	100%

With regard to the question on how often CI is used in strategic decision-making, the majority of the respondents (47.6% (10)) use CI on a continuous basis (see Figure 3). This is encouraging, because it shows that CI is a business tool in the pharmaceutical industry. It is important to note that because of the rapid changes in the external environment, continuous use of CI is imperative for a company to survive.

**Figure 3: Use of CI in strategic decision-making**



## CONCLUSION AND RECOMMENDATIONS

This article focused on the challenges South African pharmaceutical companies face and whether they use CI as a business tool. It explained why and how pharmaceutical organisations can glean intelligence for strategic planning by generating a CI capability in order to survive in competitive global markets. It was emphasised that CI provides decision-makers with a sound discipline to assist in their strategy planning scenarios and that as a business tool, CI can enhance global competitiveness and by extension encourage innovation.

The findings of the empirical survey suggest that there is sustainable commitment to the principles and practices of CI, although the enhancement of a CI culture in organisations seems to be lacking. While the majority of respondents acknowledged a partial CI portfolio rather than a full one, such evidence suggests active CI intervention in the industry. The use and importance of CI environmental scanning showed positive development, thereby expanding CI capacity. The fact that CI capacity can generate profit and is used to guide the decision-making process was a positive result. Most companies tend to access primary sources quarterly and monthly rather than continuously, which is a better option in terms of CI capability. Staff attending conferences and seminars and employees reporting back on competitive actions were the most popular primary sources. Secondary sources are accessed daily, quarterly and monthly, with trade literature and promotional material being the most popular. Surprisingly, blind-spot analysis is seldom used as an analysis method/model and there is room for concern, as it is part of the analysis toolkit necessary to glean intelligence.

The findings do support the importance and value of analysing information for continuous strategic decision-making. Most organisations attempt to nurture CI capacity in the industry. It is recommended that companies in the South African pharmaceutical industry should try to establish a formal rather than an informal CI function and that senior management needs to capitalise and consolidate CI that is used on a continuous basis in strategic decision-making. Innovation is generated from applied sciences, accumulated knowledge and human creativity. Consequently a highly specialised industry like pharmaceuticals needs to rigorously adopt a full CI package to help find solutions to global competitive markets.

A limitation of this research is that a small sample was used and further research which includes a larger sample will have to be conducted. In light of the world-wide interest in CI in developing countries and the desire to understand how South African pharmaceutical companies can improve their competitiveness, the hope is expressed that the South African government will in future create an environment which facilitates the competitiveness of organisations and encourages long-term sustainability.

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