

SKILLS SHORTAGES AND COMPETITIVENESS IN SOUTH AFRICA: THE NEED FOR COMPETITIVE INTELLIGENCE SKILLS

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South Africa as a country continues to rank low in the world of competitiveness. According to the 2008-2009 Global Competitiveness Index, South Africa was placed 45th place out of 134 countries. In the category of skilled workers, South Africa holds bottom position in terms of the retention of skilled workers. Competitive Intelligence (CI) is a means to improve competitiveness. The aim of the research was to identify the skills CI professionals need in order for CI to be used successfully as a management tool to enhance competitiveness in the country. Questionnaires were sent out to a sample of CI professionals in order to identify the skills needed by them and required the respondents to evaluate themselves regarding the certain given skills. The results revealed that the three most important CI skills needed in South Africa are networking skills, analytical abilities and research skills. However, these important skills were not reflected in the self-evaluation of the respondents. Networking skills featured 5th, research skills 8th and analytical abilities 7th, respectively. The results of this study have important implications for management and/or businesses, specifically with regard to the future conduct of CI practices.

Key phrases: Competitive intelligence, skills shortages, competitiveness, South Africa

INTRODUCTION

Competitiveness has become a contemporary issue among South African organisations. Mboweni, the previous South African Reserve Bank governor, indicated that South Africa has been unsuccessful in performing well over the past few years (Viviers, Saayman & Muller 2005:583). This is confirmed by sources such as the WEF and IMD (Viviers & Muller 2004:54). The current situation in South Africa is that too much emphasis has lately been placed on various issues such as numbers, quotas and black economic empowerment (BEE). The matter of skills was consequently seriously neglected (Smith 2008:1).

Furthermore, Gauteng required 85% procurement from BEE companies of which only 2% were used for skills development. South Africa trains only 44.6% of its skilled workers, compared to the Peoples Republic of China (69.1%), India (55%) and Poland (78.9). In 2007 only half of the whole country's matriculants passed. In 2006 a massive 200 000 graduates were unemployed, compared to 60 000 in 2004. The construction sector is also currently experiencing a serious lack of skills, which it can hardly satisfy. The ramifications are serious, especially with the 2010 Soccer World Cup just around the corner. Smith's findings support the statement made by Mboweni about South Africa's position regarding skills (Smith 2008:1).

According to Viviers et al (2005:583), the previous South African President, Thabo Mbeki, stated that "the growth of the South African economy depends on its competitiveness and measures should be taken to enhance competitiveness".

Globalisation compels a country to be competitive. Globalisation is seen as a primarily economic phenomenon involving increasing interaction and integration of national economic systems through growth in international trade, investment and capital flows (Globalisation Guide nd [a]). Countries that are getting poorer are those that are not open to world trade, notably many nations in Africa (Globalisation Guide nd [b]). Competitiveness, however, also concerns factors such as skills, higher education and training, efficient markets, the ability to harness the benefits of existing technologies and business sophistication (Blanke 2007:5). One of the most prominent indices include the IMD's (IMD 2007:1) World Competitiveness Yearbook, which analyses and ranks the ability of nations to create and maintain an environment that sustains the competitiveness of enterprises and the World Economic Forum's (WEF) Global Competitiveness Index (GCI) which assesses global competitiveness. In contrast to leading competitors, South Africa not only fails to improve its competitive position but its competitiveness is actually deteriorating. According to the GCI, in 2006-2007 South Africa was placed 35th out of 122 countries ranked for overall competitiveness. In 2007-2008 South Africa was placed 44th place out of 131 countries and the 2008-2009 45th place was granted out of a total of 134 countries ranked (GCI 2008:1).

According to a leading Solidarity unionist, Joubert in Van Tonder (2007:1), education and skills programmes of the state are insufficient and solutions to address these are working too slowly. In the category of skilled workers, South Africa holds bottom position in terms of the retention of skilled workers, the availability of engineers, efficient immigration legislation and discrimination and unemployment. The WEF (Blanke 2007:5) has developed the GCI to assess national competitiveness, which provides a holistic overview of factors that are critical in order to drive productivity and competitiveness. These factors were ranked overall out of 134 and results were as follows; institutions 46th, infrastructure 48th, macro-economy 63rd, health and primary education 122nd, higher education and training 57th, market efficiency 31st, technological readiness 49th, business sophistication 33rd and innovation 37th (GCI 2008:21). From a list of 14 aspects, respondents were asked to select the five most problematic for doing business in their country. An inadequately educated workforce was ranked as the most problematic factor for 2008 (GCI 2008:1), similar to 2007 (Blanke 2007:168). It is therefore evident that South Africa needs to redress some critical competitiveness issues, most notably the development and retention of a skilled workforce.

Competitive Intelligence (CI) has long been acknowledged as a means of strategic management to improve competitiveness (Viviers & Muller 2004:59; De Pelsmacker, Muller, Viviers, Saayman, Cuyvers & Jegers 2005:618). In South Africa CI has

improved, but has not reached nearly the same level of importance as in countries such as Australia, Canada, France, Japan and the USA (Viviers & Muller 2004:59). The CI process comprises certain phases, namely planning and focus, collection, analysis, process and structure, communication, organisational awareness and skills development. Accordingly, it could be argued that in general, lack of skills might be one cause for South Africa's poor competitive position. Therefore, with the focus on CI, if professionals do not have the appropriate CI skills, the CI process will not be conducted efficiently. The aim of this article is to identify what skills South African CI professionals need, in order for CI to be used successfully as a strategic management tool to enhance competitiveness in the country and its businesses.

CI

Fleisher and Bensoussan (2003: 6) defined CI as "the valued-added product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information that pertains to one or more aspects of an executive's needs, and that is immediately or potentially significant to decision making". This definition of intelligence served the following purposes:

- A distinction between intelligence and information is made;
- It points to the perpetual nature of intelligence; and
- It emphasises the importance of a close relationship that should exist between senior decision-makers and employees involved in intelligence activities.

De Pelsmacker et al (2005:607) stated that "CI is actionable recommendations arising from a systematic process involving planning, gathering, analysing and disseminating information on the external environment for opportunities, or developments that have the potential to affect a company's or country's competitive situation". Calof and Skinner's (1999:24) view is closely related; they state that "at its most basic description, intelligence is analysed information". The literature study revealed CI to be a tool that transforms information into actionable intelligence that, if used in strategic decision-making, could enhance an organisation's competitiveness. For the purpose of this article, CI will be defined as an ongoing, systematic evaluation of the external environment for opportunities, threats and developments that could have an impact on the organisation and influence reactive decision-making.

CI SKILLS

Literature indicates that skills shortages have a huge negative effect on South Africa. Therefore, effective measures should be taken to address the problem and to improve, where possible, the situation. The World Competitiveness Yearbook 2000 (WCY) indicated that “the ability of a nation to develop an excellent education system and to improve knowledge in the labour force through training is vital to competitiveness” (Pistorius 2001:13). It is therefore alarming that with regard to the category higher education and training South Africa ranked 57th out of 128 countries ranked in 2007, down 10 places from its 47th position in 2006 (GCI 2008:21; IMD 2007:168).

The World Competitiveness Scoreboard (IMD 2008:1) presents overall rankings of 55 economies, which are ranked from the most to the least competitive. According to this, South Africa lost ground from 50th place in 2007 to 53rd in 2008. This fact is supported by a leading unionist of Solidarity who stated that education and skills programmes of the state are insufficient and solutions implemented to address these are working too slowly. In the category of skilled workers, South Africa holds the bottom position in terms of the retention of skilled workers (Van Tonder 2007:1). The previous South African Minister of Finance, Trevor Manuel, indicated in his budget speech of 2008 that additional allocations were proposed for higher education and the National Student Financial Aid Scheme and that further education colleges have been recapitalised. In addition, he added that there are signs of uncertainty in South Africa’s economy (Manuel 2008:14).

South Africa has come a long way since 1999, when it was indicated that the levels of CI being conducted, were negligible. Research indicated that there has since been an improvement in the level of CI applied in South African companies. Viviers and colleagues found that 79.8% of South African companies were concerned about the intentions and plans of their key competition, key allies and partners such as suppliers, distributors, investors and collaborators. However, although CI is growing rapidly in South Africa, it lacks highly skilled people to drive the process (Kühn 2005:3). Therefore, it is apparent that South African organisations are not well equipped to conduct CI practices (Du Toit & Muller 2004:7; Sewlal 2004:11).

SKILLS NEEDED FOR EACH PHASE OF THE CI CYCLE

All phases of the CI cycle are interrelated and therefore the success of the one will determine the success of the other. The planning and focus phase concentrates on the identification of needs in order to collect all relevant information, which is the

second phase. In the third phase all collected information must be verified to determine rationality and factuality. This information is then communicated in an appropriate way to the relevant parties. The fifth phase requires the appropriate policies and procedures to be in place for CI to make a positive contribution to the organisation. This should be communicated effectively to employees in order to develop a culture of competitiveness and organisational awareness. Finally, organisations should have an appropriate skills development programme in place to keep employees informed about the latest trends and developments in the field of CI and the organisation as such.

CI is an actionable product that originates from a process in which people play a key role. With the development of civilisations over the years, the policies, responsibilities and methods of intelligence grew. Today, apart from the changed circumstances, the characteristics and traits required from a CI professional appear to be unchanged. A very specific set of skills is required of the CI professional to conduct the various phases of the CI cycle effectively (McLellan 2001:4). These skills are obtained from various sources. For the purpose of this article the focus will be on the classification of certain skills - traits, teachable skills and professional experience. These sources are interdependent, build on one another and provide the full spectrum of skills necessary for successful CI practices (McLellan 2001:4). Business leaders and management should realise the implication of the above-mentioned, rather than agree to the concept of a single training session by an inexperienced presenter, to attain competency (McLellan 2001:4). The following is a list of generally accepted skills put together by practising CI professionals (McLellan 2001:5; Muller 2000:3):

- Traits – creativity, persistence, written and oral communication skills, analytical ability, understanding of scientific methodology, independent learning skills and business understanding.
- Teachable skills – strategic thinking, business terminology, market research presentation skills, knowledge of primary information sources and research methods, enhancement of journalistic interviewing, analytical abilities.
- Professional experience – knowledge of corporate power structures and decision-making processes, industry knowledge, enhancement of primary research skills.

Potential practitioners must develop their skills fully in order to have the ability to conduct the CI process efficiently. Lack of a specific trait could be solved through formal education (McLellan 2001:5). This statement is supported by findings of the American Productivity and Quality Centre (APQC). The Centre states that highly qualified personnel must staff the CI function. The highest priority is strategic thought combined with communication, analytical and interpersonal skills. Industry-specific

knowledge and information technology skills are also important for the CI professional (Cruywagen 2002:4; Hughes 2005:11). In order to view the competitive landscape realistically, CI personnel need to be truth seekers that take a stand against biased CI customers (Cruywagen 2002:4). Organisation, structure, planning and theories of management are of no real importance. Ventures are either successful or fail because of the people involved. The competition will only be outperformed through the attraction and use of the best people (Cruywagen 2002:7).

According to Muller (2000:7) individuals who have knowledge of CI refer to it as a “multistage process”. It could also be referred to as the CI cycle, which consists of the identification of CI needs, project planning, collection and analysis and distribution of information. Some individuals, who do not have a real understanding of the concept of CI, refer to it as “picked up intelligence”. It is, however, clear that intelligence is not picked up; it is developed (Muller 2000:7). The aim of the following section is to explore the different phases of CI in order to identify the specific traits, teachable skills and professional experiences that would make up the skills set for the CI professional.

Planning and focus

Du Toit and Muller (2004:9) stated that planning represent 80% of the intelligence process, whereas the actual execution thereof represents only 20%. Planning stresses objectivity, the public interest and relevant information (MacLeod 1996:1). CI professionals should know how to extract and identify intelligence needs from clients. They should be aware of the basic psychology types to recognise various orientations in order to give an indication of how to approach the client. Finally, it is imperative that there should be an information resource gap-analysis in order to pinpoint the client’s need (Muller 2000:7).

Collection

According to Heppes (2006:31), essential skills for the collection of information are knowledge of various methods to gain access to internal and external sources and the assessment and management of primary and secondary information sources. In addition, the individual should know how to ensure the validity and reliability of sources. CI professionals must be able to differentiate between hypothesised and open assumptions (Muller 2000:8).

Heppes (2006:31) highlights the fact that this phase is based on how the intelligence function will be conducted with regard to the gathering of relevant information. Specific emphasis is placed on the analytical capabilities that a CI professional needs

in order to manage this phase. These skills support the evaluation of how clear the client expressed his CI need and *when* and *how* the intelligence unit will find it possible to provide the information that was obtained from the available collection sources (Heppes 2006:31).

Good networking skills are also a prerequisite. Not all results can be generated from published sources. The best results are generated from human contacts. These sources not only give information, but can explain the implications and significance thereof. If for some reason they cannot help, they may be able to direct the researcher to someone who can (Murphy 2005:63). That is why the CI analyst should be a good talker as well as listener. It is of great importance that the professional should know what background information to gather beforehand, in order to decide if spending time on the interview will be worth while. Finally, in order for the collection phase to be conducted successfully, the CI professional should have excellent research skills, analytical abilities, work thoroughly, have good communication skills and ethics and be creative. Once the CI professional has collected all relevant information, the analysis phase is initiated.

Analysis

According to Heppes (2006:35-36) the CI analyst must be creative, able to offer inductive as well as deductive arguments, must be skilled in applying basic analysis methods, have the ability to make an educated guess and have the correct approach to place the situation in context, which will provide a frame of reference with regard to the specific subject. CI professionals should not rely on facts only, but should also draw upon their intuition and imaginative sources. Good analysts above all must be "comfortable with ambiguity and not dismayed by it" (Murphy 2005:133-135). However, the analysis phase of the CI process is the most difficult part. Therefore, above all, the appropriate skills are necessary to evaluate the information, seek for patterns and create different scenarios based on the analysis conducted (Heppes 2006:36). After all relevant information has been analysed, it is communicated to the client.

Communication

The primary objective of reporting is to present relevant information that is 100% accurate. The CI analyst always presents the findings to the client in an unemotional, objective manner. Also, the analyst must constantly refrain from presenting own perceptions, unchallenged statements, bias and wishful thinking.

Analysts must be modest and intellectually flexible to enable them to change their minds in light of the evidence (Murphy 2005:232). According to Muller (2000:8), presentation skills should be persuasive, assertive and diplomatic. In order for the CI process to be used to its full potential, it is vital that the concept of CI is known, understood and recognised throughout the organisation.

Process and structure, organisational awareness, culture and skills development

It could be argued that the phases of “process and structure”, “organisational awareness and culture” and “skills development” are interrelated, since an organisation’s structure is supported by the appropriate organisational culture. Employees in turn will not be interested in changing or adapting to a structure that they are not aware of, in this instance, CI. The concept of CI should be part of every employee’s job description. Awareness of the true value of intelligence needs to be created. There should also be mechanisms in place to support employees in identifying intelligence that is of significance (Murphy 2005:17).

In this section each phase of the CI cycle was discussed to explore exactly what skills are necessary to make up the skills set for the CI professional. In general skills were characterised in terms of traits, teachable skills and professional experience. It can consequently be concluded that the CI professional skills set should comprise the following:

- Traits would include leadership qualities, vigorousness, persistency, determination, the ability to work diligently and creatively, trust in intuition, be objective, unemotional and have an imaginative mindset.
- Skills that could be taught would include networking skills, verbal and non-verbal communication skills and ethics, various types of arguing and an open organised mindset.
- The ability to evaluate information based on analysis should include the creation of scenarios and recognition of patterns.

The above-mentioned states the required skills set for the CI professional as indicated by literature. The next section represents the results of a survey that was conducted among 132 individuals. The survey dealt with skills necessary for the CI professional in South African organisations.

EMPIRICAL SURVEY TO DETERMINE THE CI SKILLS NEEDED IN SOUTH AFRICA

Research methodology

The objective of the survey was to determine the skills needed by South African professionals, in order to conduct the CI process successfully. CI in South Africa is still in its infancy and there is no recognised list of practising South African CI professionals available in South Africa. For this reason the respondent database consists of attendees of CI courses, workshops and seminars held by the Department of Information and Knowledge Management at the University of Johannesburg. Attendees represent top decision-makers of organisations across all sectors in Gauteng province. The University of Johannesburg's database consists of 132 individuals. In total, 132 individuals were thus included in the sample. A questionnaire was compiled containing 12 questions in total. Section A of the questionnaire was limited to background and/or biographical information, while Section B explored the respondent's perceptions about necessary skills for the CI professional. Section C required the respondent to evaluate him/herself regarding certain given skills. Finally, in Section D the respondent was asked for additional comments that could be useful in the scope of this study. The questionnaire was developed in a Uniform Resource Locator (URL) format by the Statistical Consultation Services (Statcon) at the University of Johannesburg (A URL is a compact string representation for a resource available via the Internet). The questionnaire was sent out via email, including the URL link and accompanied by a covering letter to all respondents on the database. The respondents had to submit the completed questionnaire directly via the URL link to Statcon for statistical analysis of the data. The data were put into spreadsheets, with statistical graphs for a visual representation of the results. Seventy-eight completed questionnaires were received, which gave a response rate of 59%.

Findings

Biographical information

Respondents within the age group of 40 to 49 years represented the majority with the total of 42.1%, respondents within the age group of 24 to 39 years represented 34.2%, followed by 23.7% respondents falling in the category of 50 years or older. Most respondents (75.3%) hold a degree with 50.6% of the respondents in possession a post-graduate degree, whereas only 24.7% of the respondents' highest qualification was a post matric diploma and 24.7% had a baccalaureate degree. The above results support the findings of Pietersen (2006:49), which indicated that the CI

professional should be a highly qualified person. The majority of the respondents (68.8%) were in the top structure of the organisation whereas 31.2% were in line management. This implies that most concern for CI lies with top management. The findings support the research of Viviers and colleagues, which found that senior management is most supportive of CI (Viviers & Muller 2004:63). Multi-national corporations and private organisations comprise 35.1% of the respondents, respectively. National corporations represent 16.9%, parastatal ones 7.8% and registered non-governmental organisations (NGOs) 1.3%. Other companies that did not fall into any of the mentioned categories represented 3.9% of the respondents. Most respondents originated from companies with 201 or more employees (70.5%) and 29.5% of the respondents were from companies with no more than 200 employees. This indicates that CI is used more often by larger organisations, since only they can afford such a unit. CI has been in existence for at least more than 5 years in 60.8% of the companies surveyed.

Skills requires by CI professionals

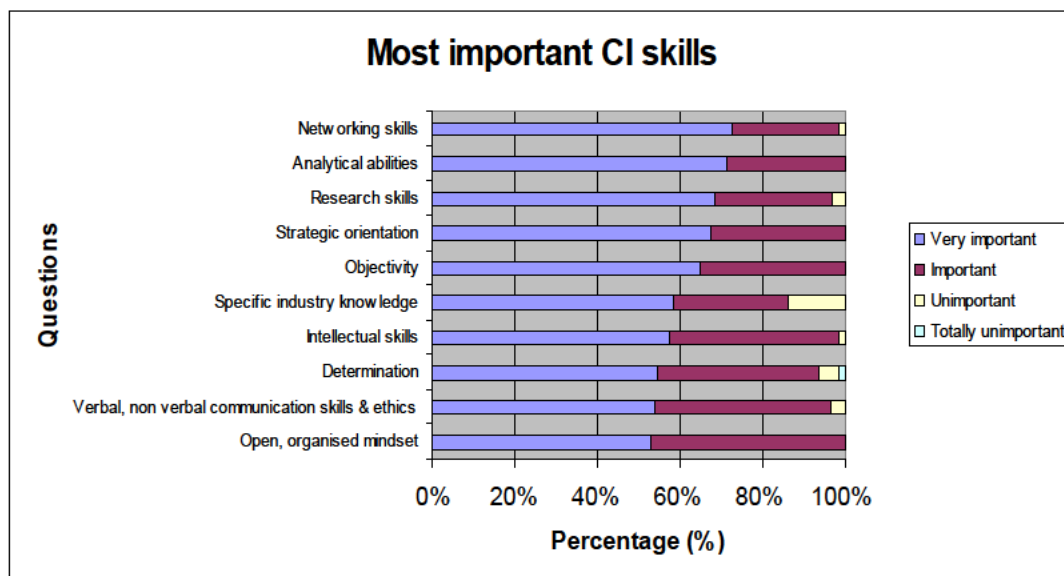
Respondents were asked to identify CI skills they deem as necessary for a CI professional. Skills identified in the literature survey were listed and respondents had to give each skill a rating out of 100% according to a Likert scale which comprised the following - Totally unimportant, Unimportant, Very important and Important. The credibility of this section is measured by the Cronbach Alpha Coefficient which is a coefficient of reliability (or consistency). Cronbach Alpha Coefficient typically ranges from 0 to 1.0, with higher magnitudes being more desirable. The individual sets of questions in the research questionnaire were rated as reflected in Figures 1 and 2. An overall coefficient of 0.809 was calculated for the results obtained and this is considered to be in the range of scores considered as reliable, which should be above 0.7 (see Table 1).

Table 1: Cronbach's Alpha for important skills

Cronbach's Alpha	N of Items
0.809	21

Figures 1 and 2 illustrate the most important skills necessary for the CI professional, as identified by the respondents. Please note that the results are split into two graphs in order to provide a clear layout of the findings.

Figure 1: Representation of CI skills rated from most to least important



The three most important skills in Figure 1 represent networking skills with 72.7% (48), analytical abilities with 71.2% (47), and research skills with 68.2% (45). This was followed by strategic orientation representing 67.7% (44), objectivity with 65.2% (43), specific industry knowledge with 58.5% (38), intellectual skills with 57.6% (38), determination in 8th place with 54.7% (35), verbal and non-verbal communication skills and ethics in 9th place with 53.8% (35) and lastly, an open organised mindset, which was rated at 53.0% (35) in 10th place.

Networking skills proved to be the most important skill that a CI professional should have, together with research skills, that were rated third. The retrieval of relevant information within a short timespan necessitates good networking skills.

The respondents put a high priority on analytical abilities, scoring it as second in importance. This skill is of great importance in especially the analysis phase of the CI cycle, which in turn is the “central nervous system” (Muller 2002:2) of the CI process. Without proper analytical abilities, high-quality information that was gathered will be worthless. The above findings support the results of Pietersen (2006:51), which found analytical abilities to be the highest rated required skill for the CI analyst.

Figure 2: Representation of CI skills rated from most to least important (cont)

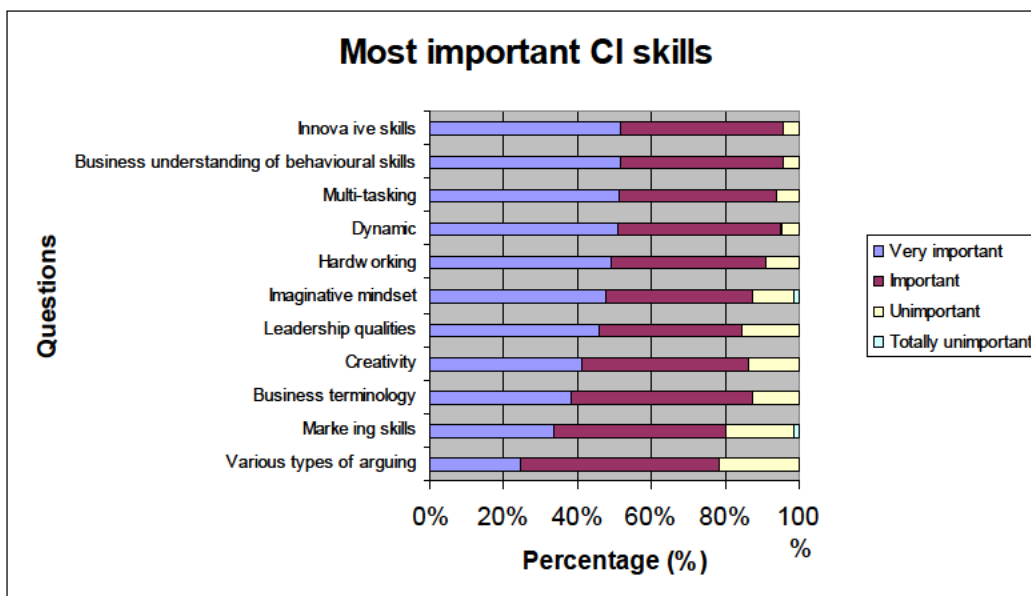


Figure 2 continues to provide a graphic explanation of the most important CI skills. Innovative skills were placed 11th with 43.9% (29), followed by business understanding of behavioural skills with 51.5% (34), multi-tasking with 51.5% (34), being dynamic with 50.8% (33) and hardworking with 49.2% (32). Furthermore, an imaginative mindset was rated 16th with 47.7% (31), leadership qualities received 46.2% (30), creativity 41.5% (27) and business terminology 38.5% (25). Lastly, marketing skills were rated at 33.8% (22) by respondents, followed by various types of arguing at 24.6% (16).

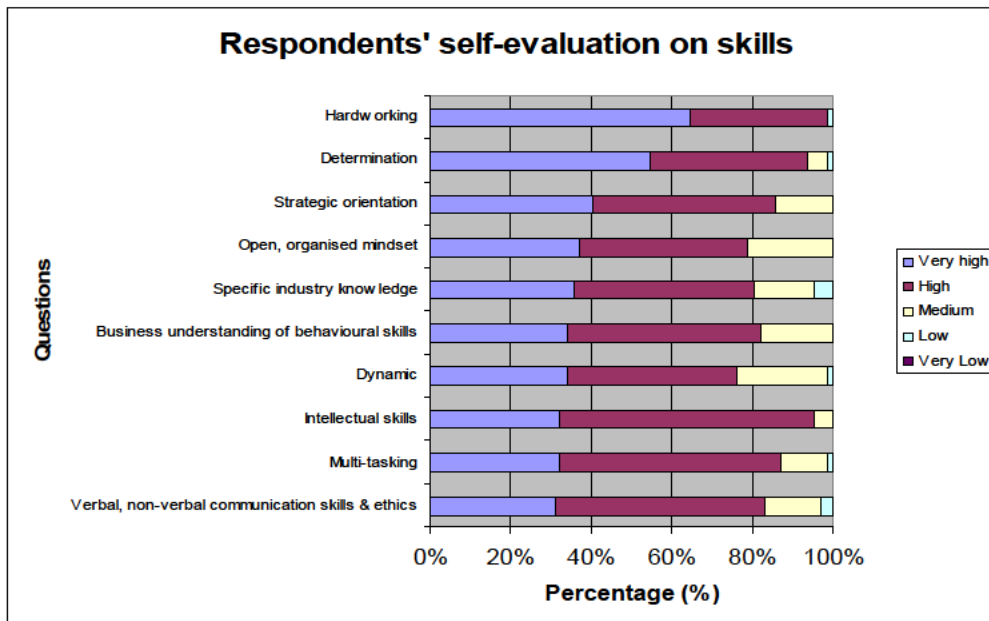
Evaluation of CI skills

Respondents were asked to rate their competency level with regard to the CI skills identified in the previous section (see Figures 3 and 4). The credibility of this section is also measured by the Cronbach Alpha Coefficient. The individual sets of questions in the research questionnaire were rated as in Figures 3 and 4. An overall coefficient of 0.877 was calculated for the results obtained and this is considered to be in the range of scores considered reliable, which should be above 0.7 (see Table 2).

Table 2: Cronbach’s Alpha for self-evaluation of important skills

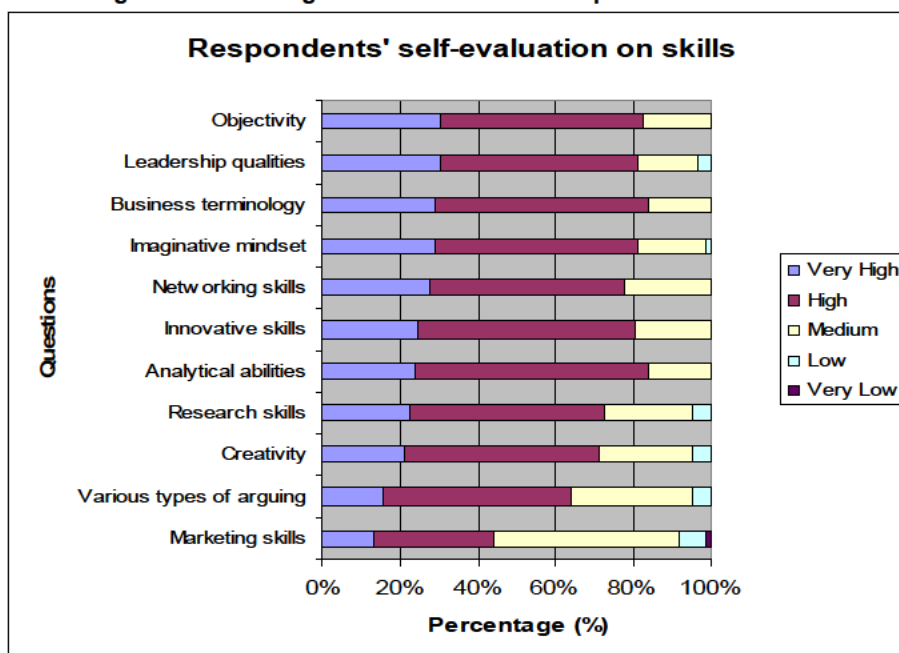
Cronbach's Alpha	N of Items
0.877	21

Figure 3: Highest rating skills according to self-evaluation of respondents



According to Figure 3, hardworking is placed first with 64.5% (40), followed by determination with 54.8% (34), strategic orientation with 40.3% (25), an open, organised mindset with 37.1% (23), and specific industry knowledge with 36.1% (22), business understanding of behavioural skills with 33.9% (21), being dynamic with 33.9% (21), intellectual skills with 32.3% (20), multi-tasking with 32.2% (20) and verbal and non-verbal communication skills and ethics with 31.3% (20).

Figure 4: Lowest rating skills according to self-evaluation of respondents



With regard to the lowest rating skills (see Figure 4), 51.6% (32) of the respondents rated themselves very high on objectivity, 30.6% (19) on leadership qualities, 29.0% (18) on business terminology, 29.0% (18) on an imaginative mindset and 27.4% (17) on networking skills. Furthermore, innovative skills were rated very high by 24.6% (15) of respondents, analytical abilities by 24.2% (15), research skills by 22.6% (14) and creativity by 21.0% (13) of respondents. Lastly, various types of arguing and marketing skills received 15.9% (10) and 13.1% (8) of responses, respectively.

Therefore, the three skills rated highest on the respondents' self-evaluation, are being hardworking, having determination and strategic orientation. Comparing the results from the two different questions, it became apparent that the three skills indicated as most important in Figure 1 were not reflected in the self-evaluation of the respondents in Figures 3 and 4. In fact, networking skills that were placed first (48) in Figure 1, were only rated by 17 respondents according to Figure 4. Therefore, the conclusion can be reached that CI professionals in the industry do not have good networking skills. The fact that this skill tested very low in the self-evaluation, may reflect the findings of Viviers and Muller (2004:64). They found that even though the collection focus was excellent, the problem lies with the process and methods of collecting information. Since networking skills are important in the process of collection, the need to address this gap is highlighted. Analytical abilities that rated 2nd important according to Figure 1 did not even feature in the top ten highest rated skills in the self-evaluation. Therefore, the conclusion can be reached that having analytical abilities is one of the weakest links in the current CI skills set. This is supported by research findings of Viviers and Muller (2004:61) who concluded that analysis may be one of the weakest areas in South African companies, with reference to the CI process. A closer look at strategic orientation reveals that it was rated fourth with regard to the importance of skills and third with reference to the self evaluation. Therefore, the conclusion can be reached that respondents do have a relatively strong strategic orientation. However, attempts should be made to change the direction to competitiveness, by finding a "balance between the organisation's internal and external environment" (Pietersen 2006:52).

RECOMMENDATIONS

The findings of the empirical survey have important implications for management and/or businesses, specifically with reference to the future conduct of CI practices. Because CI is still in its beginning stages in South Africa, knowledge of the subject is very limited. Contributing factors may include inadequate training programmes and the non-existence of active societies to foster CI. Therefore, the recommendations

which arise from the research findings are aimed at contributing to the knowledge of CI. These findings include the following:

- It was found that respondents identified the three most important skills needed in South Africa as networking skills, analytical abilities and research skills. However, these important skills were not reflected in the self-evaluation of the respondents. Networking skills featured 5th, research skills 8th and analytical abilities 7th, respectively. Proper analysis depends on the quality of information gathered. Networking skills, together with research abilities, are crucial for extracting relevant information. The conclusion therefore can be reached that there is a gap between what respondents view as important skills and their competency levels concerning those identified skills. One way of addressing this inequality might be to adjust courses and/or training programmes.
- It is suggested that the “applicant CI professional” undergo psychological testing in order to eliminate unsuitable candidates at the start of the recruitment process. The tests could also assist in identifying the aspects in which the candidate would need further training. This could be cost- and time-saving. Also, the intellectual ability of the candidate to understand the CI concept needs to be determined. An example of such a test could be the Myers-Briggs Type Indicator (MBTI), which is used for indicating personality types. It is assumed that different personality types function better in different environments and ideally a match between the individual and the environment should be sought.
- For large organisations it is suggested that a CI team be appointed and not just an individual. In that way a specialist could be appointed for each phase of the CI process. However, in smaller companies money is at stake, therefore a team cannot be appointed. Smaller organisations should make certain that the appointed CI professional has all the necessary skills to conduct the whole CI process effectively.
- Furthermore, higher academic institutions should expand and tailor-make course content in terms of learners’ needs. The current programmes define CI very broadly and learners that do not come from an intelligence background, find it either hard or impossible to grasp the concept. However, care should be taken not to lower the standard. This will produce CI professionals who are prepared for the CI job market. The need for CI is rather to specialise than to generalise.

Since all phases of the CI cycle are interrelated, a specific skill set will be necessary to conduct this process successfully. Therefore, in order to illustrate this aspect, it is recommended that the following skills are included in the job description of CI professionals in South Africa:

- considerable knowledge of the principles and practices of CI;
- the ability to aggregate, analyse and synthesise industry data into communicable deliverables that will help guide decisions;
- the ability to think strategically;
- specific industry knowledge;
- the ability to express ideas clearly and concisely, orally and in writing;
- presentation skills;
- technological skills;
- networking skills;
- research skills;
- the ability to multi-task;
- the ability to work according to deadlines; and
- an innovative personality.

CONCLUSION

The objective of this article was to determine the skills necessary for the CI professional in South Africa. Literature indicated that South Africa's competitive position is declining and consequently also the situation of companies. A management tool to change this position is CI; however this cannot be used to its full potential without appropriately skilled people. The CI process consists of the planning of the process, collection of relevant information and the analysis thereof. After the interpretation, the results are communicated to the client. In order for the above to be conducted successfully, the organisation's process and structure should be supportive of such a process. An additional subject of importance is the culture of the organisation that should foster CI awareness. Finally, skills development has to be initiated in order to keep all employees "skill-fit". Specific skills are needed by the CI professional in order to conduct the CI process successfully. Findings of the survey have important implications for the overall management of competitive organisations in South Africa. Regardless of the industry, the skills identified are the most basic for CI to be conducted. However, now that the skills have been identified, the onus rests on respectively, educational institutions and management to revise CI programmes accordingly and initiate skills training.

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