THE IMPACT OF BUSINESS TYPE AND SECTOR, LOCATION AND ANNUAL TURNOVER ON COMPETITIVE INTELLIGENCE PRACTICE OF SMALL AND MEDIUM-SIZED ENTERPRISES

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Abstract

Small and Medium-sized Enterprises (SMEs) contribute much to job creation, poverty eradication, economic development and growth. Countries rely on SMEs for wealth creation and social wellbeing of their citizens. Moreover, SMEs contribute to the global competitiveness of a country. For SMEs to continue offering all these benefits to the country, they must be competitive in the midst of global competitive pressure. To gain competitive advantage, enterprises of different sizes practice Competitive Intelligence (CI). While CI practise has been widely researched in large enterprise, there is lack of CI practice research in SMEs. This research establishes the impact of business type and sector, location and annual turnover on the competitive intelligence practise of SMEs. The research was quantitative in nature and a self-administered questionnaire was used to collect data from owners/managers of SMEs.

Keywords: SME's, Competitive Intelligence (CI), Competative Advantage

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1. Introduction

Small and Medium-sized Enterprises (SMEs) contributes much to job creation, wealth creation, skills development, economic growth and the gross domestic product (Fatoki and Odeyemi 2011). SMEs help to improve quality of life. Having dropped in the global competitiveness ranking, South Africa relies on SMEs to improve its competitiveness (The Global Competitiveness Report 2014-2015). Due to technology and globalisation, SMEs no longer just compete with their local rivals but also with international ones too (Pellissier and Nenzhelele, 2013a). To survive in this global competitive business environment, SMEs have to seek tools that offer a competitive advantage. Competitive Intelligence (CI) has been widely recognised as a tool that offers competitive advantage and assists in decision-making (Maune, 2014). CI helps improve the quality of products or services, decisions and the overall quality of life (Du Toit and Sewdass, 2014). CI helps enterprises to prepare against the strategies of their rivals (Nasri, 2011). It ensures that enterprises are not caught off guard. CI is a critical success factor for small and large, for-profit and non-profit, private and public, and local and international enterprises (Nasri and Zarai, 2013). Unlike industrial espionage, CI is both ethical and legal (Roitner, 2008). Information for CI is collected ethically and legally. While research on CI practice has been widely conducted in large businesses, there is lack of research on CI practice pertaining to small businesses. This research aims to establish the impact of business type and sector, location and annual turnover in the CI practise of SMEs.

2. Literature review

2.1 Definition of competitive intelligence

There are many definitions of CI in the literature (Weiss and Naylor, 2010). Some scholars define CI as a product and others define it as a process (Brody, 2008). Roitner (2008) concludes that CI is both a product and a process. Most of these definitions differ because of a change in words, use of synonyms and emphasis (Brody, 2008). It has been argued that CI practitioners are too busy to have time to define CI (Fleisher and Wright, 2009). The existence of so many definitions in the field of CI creates confusion amongst scholars and practitioners (Colakoglu, 2011). Also, it makes CI to be a practice with unstable borders (Haddadi, Dousset and Berrada, 2010). Due to a lack of agreement on the definition of CI, it has been confused with industrial espionage (Colakoglu, 2011). However, CI is different from industrial espionage because CI is legal and ethical (Haliso and Aina, 2012). Having realised the problem of endless definitions, Pellissier and Nenzhelele (2013b) analysed fifty CI definitions to establish commonality and differences in order to propose a comprehensive and universally acceptable definition. Pellissier and Nenzhelele (2013b) define CI as "a process or practice that produces and disseminates actionable

intelligence by planning, ethically and legally collecting, processing and analysing information from and about the internal and external or competitive environment in order to help decision-makers in decision-making and to provide a competitive advantage to the enterprise." This definition will be used for the purposes of this study.

2.2 Evolution of competitive intelligence

CI evolves from economics, marketing, military theory, information science and library and strategic management (Juhari and Stephens, 2006; Deng and Luo, 2010). Governments of countries rely on intelligence for protection of their citizens (Deng and Luo, 2010). Marketing departments of firms all over the world rely on intelligence for marketing, pricing and promotion of their products or services (Nasri and Zarai, 2013). Libraries rely on intelligence for quality sources of information for scholars (Fleisher, 2004). Strategists rely on intelligence to anticipate and prepare for future competition (Barrett, 2010).

CI has been around since the first time it was officially practiced in business and recorded in the literature (Juhari and Stephens, 2006). Since its inception, CI has been practiced by public, private, for-profit, non-profit, large and small organisations. While CI is a relatively new business discipline, it is evolving in complexity and importance to keep pace with rapid business development (Heppes and Du Toit, 2009). Due to its benefits, more organisations are practicing CI either formally or informally (Nasri and Zarai, 2013).

Post-apartheid, South African firms have been exposed to global competition (Pellissier and Nenzhelele, 2013a). To survive in the midst of global competition, South African firms are practicing CI (Du Toit and Sewdass, 2014). This is confirmed by Muller (2006) who points out that CI took root in South Africa in the mid-1990s and early-2000s. CI in South Africa emerged from the business sector (Heppes and Du Toit, 2009). Although South African firms have been inward-looking, they are starting to realise the importance of CI from year to year (Adidam, Gajre and Kejriwal, 2009). De Pelsmacker, Muller, Viviers, Saayman, Cuyvers and Jegers (2005) point out that enterprises that formally practice CI are growing in number and that CI is especially strong in the banking sector, the information technology sector, the telecommunications sector and the electricity supply sector. Although CI practice has been widely applied in South Africa in for-profit organisations, there is a lack of report of CI practice in non-profit organisations (Sewdass and Du Toit, 2014).

2.3 Competitive intelligence needs

Managers are paying more attention to CI and as a result there is a growing desire to fulfil CI needs (Barnea 2014; Lin and Yan-Zhang, 2015). The end product of CI must satisfy the needs of decision-makers and trigger new intelligence needs (Pinto, 2014). In order to have clear, unambiguous and easy to understand intelligence needs there has to be a two-way communication between the CI unit and the decision-makers (Nasri and Zarai, 2013; Du Toit and Sewdass, 2014). Formal meetings must be organised for CI practitioners and decision-makers to discuss their intelligence needs (Bartes, 2014b). Decision-makers have plenty of intelligence needs and these needs must be differentiated from information needs, prioritized and translated into Key Intelligence Topics (KITs) (Prescott, 1999; Nasri, 2011; Degaut, 2015). KITs are those decision-based, strategic issues about which managers must be regularly informed to set and implement strategy (Herring, 1999). CI is aimed at answering KITs (Bartes, 2014b). According to Herring (1999), only intelligence needs that are of the highest priority and key to the success of the organisation must be fulfilled with the scarce resources. KITs are established and clearly defined during the planning phase of the CI process (Yassine, 2014). KITs can come from different levels of management such as strategic, functional and tactical (McGonagle and Vella, 2012). Quality CI depends on clearly defined and unambiguous KITs (Nasri, 2011).

According to Barnea (2014), KITs must cover worldwide competition and tactical and strategic issues instead of just local competition and tactical issues. It is impossible to gain a competitive advantage from CI without clearly defined KITs (Barnea, 2014). According to Herring (1999), there are three categories of KITs, namely strategic decisions and actions, topics requiring early warning and profiles, characteristics and descriptions of the key players. Strategic decisions and actions include the development of strategic plans and strategies. Early warning topics include competitor initiatives, technological surprises and government actions. Descriptions of key players include competitors, customers, suppliers, regulators and potential partners.

2.4 Competitive intelligence awareness

In today's global competitive business environment, only businesses with CI awareness programmes will survive (Căpăţînă and Vanderlinden, 2012; Bourret, 2012). CI awareness helps to raise competitiveness in a sector which increases the quality of products and services (Wright, Bisson and Duffy, 2012). CI awareness is a critical success factor for CI (Nasri and Zarai, 2013). Although there is an increase in CI awareness, there is still a need for enterprises to raise awareness for CI (Garcia-Alsinaa, Ortoll and Cobarsi-Morales, 2013; Bartes, 2014). Du Toit and Sewdass (2014) and Fatti and Du Toit (2013) recommend that South African enterprises should develop a competitive culture and create CI awareness amongst their employees. Raising CI awareness amongst

employees is a major challenge and without a culture of CI awareness it is difficult to develop actionable CI (Nasri, 2012; Barnea, 2014). Employees who are unaware of CI tend to give information away cheaply to competitors or, worse still, get misinformed by competitors who are well aware of CI (Singh and Vij, 2012; Wright, Bisson and Duffy, 2012).

2.5 Competitive intelligence critical success factors

It is widely accepted that CI is a critical success factor for business (Nasri and Zarai, 2013). But what is critical for the success of CI? The success of CI depends on the size of the organisation, availability of resources, CI awareness within the organisation and the support it receives from the entire firm (Saayman, Pienaar, De Pelsmacker, Viviers, Cuyvers, Muller and Jegers, 2008). According to Degaut (2015), the relationship between a CI unit and decision-makers determines the success or failure of CI. A better relationship between the CI unit and decision-makers ensures that CI practitioners have clear, definite and unambiguous intelligence needs. Bartes (2014a) argues that a thorough, secure and successful information analysis phase is a critical success factor for CI. According to Du Toit and Sewdass (2014), formalisation is key for the success of CI. There is a wide agreement that companywide awareness of CI is a critical success factor for CI (Maune 2014; Du Toit and Sewdass, 2014). Barnea (2014) identified the following CSFs for CI: organisational culture, procedures and information technology support.

According to Nasri and Zarai (2013), the following factors are critical for the success of CI: management support and understanding: focus and CI efforts, location of CI function, CI personnel and CI product. When managers see the value of CI, they support and invest in it. A resourced CI function is effective and fruitful. CI becomes successful when it focuses on KITs. KITs are clearly defined, prioritised and unambiguous intelligence needs (Herring 1999).

When CI is located for easier communication to decision-makers, it leads to the success of CI (Nasri and Zarai, 2013). To be successful a CI unit must be staffed with qualified personnel (Nasri and Zarai, 2013). These people should be able to perform basic intelligence activities. They must have knowledge of strategic management, marketing and sales, production and distribution, product development and finance and accounting. Strauss and Du Toit (2010) insist that CI personnel must have formal training on CI. Although training is an additional construct to the CI process, it is clear that training contributes to the success of each phase in the CI cycle (Strauss and Du Toit 2010). Nasri and Zarai (2013) conclude that the CI unit must be surrounded by employees who are aware of CI. That way, employees will play a role in providing useful information for CI and not give out information to competitors cheaply. Therefore, the CI unit must be staffed by personnel who are able to train people and raise CI awareness in the organisation. Systems should be put in place to reward general employees who participate in CI activities (Strauss and Du Toit, 2010). CI is successful when it produces intelligence that fulfils the KITs (Nasri and Zarai 2013). This ensures that decisions are made based on quality intelligence (Bose 2008).

Small and medium-sized enterprises

The importance of SMEs in creating jobs and economic wealth is globally recognised (Fatoki and Garwe 2010). SMEs employ more than 95% of the world's working population and are the main source of employment in developing countries (Abor and Quartey 2010). As a result, governments throughout the world focus on the development of the SME sector to promote economic growth (Fatoki and Gware 2010). Fatoki and Gware (2010) reveal that in South Africa, SMEs contribute 56% of the employment in the private sector and 36% of the gross domestic product (GDP). However, gaining a competitive advantage presents an enormous challenge for SMEs. Prior (2007) is of the opinion that SMEs have many competitors that offer similar products or services and operate in the same markets and locations. Moreover, SMEs have limited resources. Prior (2007) suggests that CI is the key to SMEs' competitiveness.

Definition of small and medium-sized enterprises

According to the *South African National Small Business Act 102 of 1996*, 'small business' means a separate and distinct business entity (including co-operative enterprises and non-governmental enterprises) managed by one or more owner(s) which, including its branches or subsidiaries (if any), predominantly operates in any sector or subsector of the economy and which can be classified as a micro-enterprise, a very small enterprise, a small enterprise or a medium enterprise.

Classification of small and medium-sized enterprises

The most widely used framework for SMEs in South Africa is set out in the *South African National Small Business Act 102 of 1996*, which defines five categories of enterprises in South Africa. The definition is based on the number of employees (the most common definition) per enterprise size combined with the annual turnover categories and the gross assets (excluding fixed property). The five enterprise categories are as follows (Abor and Quartey 2010):

1. Survivalist enterprise: The income generated is less than the minimum income standard or the poverty line. This category is considered pre-entrepreneurial, and includes hawkers, vendors and subsistence farmers. (In practice, survivalist enterprises are often categorised as part of the micro-enterprise sector).
2. Micro-enterprise: The turnover is less than the VAT registration limit (that is, R150 000 per year). These enterprises usually lack formality in terms of registration. They include, for example, *spaza* shops, minibus taxis and household industries. They employ no more than 5 people.
3. Very small enterprise: These are enterprises employing fewer than 10 paid employees, except mining, electricity, manufacturing and construction sectors, in which the figure is 20 employees. These enterprises operate in the formal market and have access to technology.
4. Small enterprise: The upper limit is 50 employees. Small enterprises are generally more established than very small enterprises and exhibit more complex business practices.
5. Medium enterprise: The maximum number of employees is 100, or 200 for the mining, electricity, manufacturing and construction sectors. These enterprises are often characterised by the decentralisation of power to an additional management layer.

3. Methodology

A survey was undertaken to collect data from SMEs in the City of Tshwane Metropolitan Municipality (CTMM) of the Gauteng Province in South Africa. The CTMM is the largest municipality in South Africa. It is the capital city of South Africa. Data was collected from one hundred SMEs from nine locations in the CTMM using a quota sample due to time and financial constraints. Locations were sampled in order to cover both urban and rural areas of the CTMM. The sample consisted of 74% urban and 26% rural SMEs in the CTMM. The locations included in the sample were Mabopane, Mamelodi, Soshanguve, Ga-Rankuwa, Eersterust, Atteridgeville, Winterveld, Silverton or Pretoria East, Pretoria CBD and Rosslyn. Data were collected using a questionnaire. Questionnaires were hand-delivered to SMEs that do not have access to e-mail. As for the SMEs that had access to e-mail, the questionnaire was sent via e-mail. The questionnaire had two sections. The aim of the first section was to collect biographies of SMEs and the aim of the second section was to establish the awareness and practice of CI by SMEs.

One hundred and fifty questionnaires were distributed to the respondents hoping that at least one hundred would be returned by the cut-off date. Indeed, one hundred usable questionnaires were received by the cut-off date. E-mail and phone calls were used to follow up on distributed questionnaires. This ensured that the required one hundred questionnaires were returned. Therefore the response rate was 66.67%. The internal data reliability was calculated to be 0.806 (Cronbach' Alpha).

4. Results

4.1 Demographics

Of these one hundred SMEs that participated in the survey, only one respondent (1%) was a sole proprietorship; fourteen respondents (14%) were partnerships; fifty-five (55%) were close corporations; and thirty (30%) were companies. These forms of enterprises are defined by Nieman (2006) as follows: *proprietorship* is an enterprise that has one owner and there is no distinction between the personal estate of the owner and the business estate. A *partnership* is an enterprise formed when a minimum of two and a maximum of 20 people conclude an agreement to do business as a partnership. A *close corporation* is a separate legal entity and is regulated in terms of the *South African Close Corporation Act 69 of 1994*. The CC must be registered in terms of this Act in order to attain separate legal entity status. A CC must have at least one member and not more than 10 members. A *company* is an association of people incorporated in terms of the *Companies Act 61 of 1973*. A company can have share capital or can be incorporated not for gain, in which case it will not have share capital. Eleven business sectors or subsectors were identified from the literature. Only two additional industries were added by respondents and these are: the cleaning industry (1%) and media and marketing (1%). The remainder of the respondents are spread as follows: finance and business services (8%); catering, accommodation and other trade (19%); retail and motor trade and repair services (23%); electricity, gas and water (2%); community, social and personal services (18%); wholesale trade, commercial agents and allied services (5%); construction (8%); and manufacturing (12%).

Of the one hundred SMEs, fifteen (15%) had 21–50 employees, thirty (30%) had 11–20 employees, thirty-six (36%) had 6–10 employees and nineteen (19%) had 1–5 employees. Concerning years of business operation, fifty (50%) were operating for 6 or more years, thirty-nine (39%) were operating for 3–5 years and only eleven (11%) were in operation for 1–2 years. With regard to annual turnover, two (2%) SMEs had a turnover of between R6 million to R10 million, forty-eight (48%) had a turnover of between R1m and R5m and the rest (50%) were making less than R1m. Pertaining to educational qualifications of the owner or manager five scales were identified, namely grade 8 to grade 10, grade 11 to grade 12, an undergraduate diploma or degree, an honours degree and a masters or doctoral degree. Only five (5%) of the respondents had a masters or doctoral degree, twenty-one (21%) had an honours

degree, 47% had an undergraduate diploma or degree and twenty-seven (27%) had grade 11 or grade 12. Pertaining to the owner or manager's years of working experience, only one (1%) of the respondents had less than one year of working experience, four (4%) had 1–2 years of working experience, fifty (50%) had 3–5 years of working experience and 45% had 6 or more years of working experience.

4.2 Competitive Intelligence Practice in Small and Medium-sized Enterprises

To establish the CI practice in SMEs, a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree' was developed to establish CI practice in SMEs. Numbers 1 to 5 were used with number 1 denoting 'strongly disagree' and number 5 denoting 'strongly agree'. The variables used to establish CI practice by SMEs are shown in table 1. The aim of **variable 1** was to establish if these SMEs practice CI. A standard deviation of 0.687 indicates that there was less spread of responses to this variable. A mean value of 4.45 indicates that the majority of these SMEs practice CI. **Variable 2** was aimed at establishing the formalisation of CI process within SMEs. A standard deviation of 1.078 indicates that there was a wide spread of responses to this variable. A mean value of 2.01 indicates that the majority of these SMEs do not have a formalised CI process. The purpose of **variable 3** was to establish if these SMEs have a computerised CI system. A standard deviation of 2.436 indicates that there was a wide spread of responses to this variable. A mean value of 1.84 indicates that these SMEs do not have a computerised CI system.

The aim of **variable 4** was to establish if these SMEs have a formalised CI function. A standard deviation of 1.143 indicates that there was a wide spread of responses to this variable. A mean value of 2.16 indicates that these SMEs do not have a formalised CI function. The aim of **variable 5** was to establish if these SMEs outsource CI practice. A standard deviation of 1.202 indicates that there was a wide spread of responses to this variable. A mean value of 3.10 indicates that more than half of these SMEs hire people or other businesses to collect information on their behalf. **Variable 6** was intended to establish if these SMEs hire CI professionals. A standard deviation of 0.943 indicates that there was less spread of responses to this variable. A mean value of 1.83 indicates that the majority of these SMEs do not hire CI professionals. The aim of **variable 7** was to establish if these SMEs know their competitors' strengths and weaknesses. A standard deviation of 0.856 indicates that there was less spread of responses to this variable. A mean value of 3.43 indicates that the majority of these SMEs know their competitors' strengths and weaknesses.

Variable 8 was intended to establish if these SMEs know who their competitors' customers are. A standard deviation of 0.579 indicates that there was less spread of responses to this variable. A mean value of 4.26 indicates that the majority of these SMEs know who their competitors' customers are. The aim of **variable 9** was to establish if SMEs know who their competitors' suppliers are. A standard deviation of 0.996 indicates that there was less spread of responses to this variable. A mean value of 3.41 indicates that the majority of these SMEs know who their competitors' suppliers are. The aim of **variable 10** was to establish if these SMEs know the price of their competitors' products or services. A standard deviation of 0.522 indicates that there was less spread of responses to this variable. A mean value of 4.48 indicates that the majority of these SMEs know the price of their competitors' products or services.

The purpose of **variable 11** was to establish if these SMEs collect information about their competitors and analyse it. A standard deviation of 0.659 indicates that there was less spread of responses to this variable. A mean value of 4.64 indicates that almost all of these SMEs collect information about their competitors and analyse it. **Variable 12** was intended to establish if managers of these SMEs support CI practice. A standard deviation of 0.761 indicates that there was less spread of responses to this variable. A mean of 3.63 indicates that the majority of these SMEs agree that their managers support CI practice. The aim of **variable 13** was to establish if these SMEs practice CI to help in decision-making. A standard deviation of 0.716 indicates that there was less spread of responses to this variable. A mean of 4.65 indicates that these SMEs practice CI to help in decision-making.

The following strong positive linear correlations were established between variables in Table 1 and business type and sector, location and annual turnover:

Pearson's r for variables 3 and business sector was 0.841. Thus, there was a very strong positive linear association between these two variables. The cross-tabulation (see table 2) shows that 11 out of 12 (91.67%) manufacturing SMEs; seven out of eight (87.50%) construction SMEs; three out of five (60%) wholesale trade, commercial agents and allied services SMEs; 17 out of 18 (94.44%) transport, storage and communications SMEs; two out of three (66.67%) community, social and personal service SMEs; two out of two (100%) electricity, gas and water SMEs; 21 out of 23 (91.30%) retail and motor trade, and repair services SMEs; 18 out of 19 (94.74%) catering, accommodation and other trade SMEs; and seven out of eight (87.50%) finance and business services SMEs did not have computerised CI. Thus, the electricity, gas and water sector had two SMEs with computerised CI systems and SMEs in business trade sectors did not have computerised CI systems.

Table 1. Competitive intelligence practice variables

Variable number	Variables for establishment of CI practice	Mean	Standard deviation
1	We practice competitive intelligence in our business.	4.45	0.687
2	We have a formalised competitive intelligence process.	2.01	1.078
3	We have a computerised competitive intelligence system.	1.84	2.436
4	Our business has a formalised competitive intelligence function.	2.16	1.143
5	We hire people or other businesses to collect information on our behalf.	3.10	1.202
6	We have competitive intelligence professionals in our business.	1.83	0.943
7	We know our competitors' strengths and weaknesses.	3.43	0.856
8	We know who our competitors' customers are.	4.26	0.579
9	We know who our competitors' suppliers are.	3.41	0.996
10	We know the prices of our competitors' products or services.	4.48	0.522
11	We collect information about our competitors and analyse it.	4.64	0.659
12	Our managers support competitive intelligence practice.	3.63	0.761
13	We gather competitive intelligence for decision-making.	4.65	0.716

Table 2. Correlation between the business sector and computerisation of competitive intelligence

	We have a formalised competitive intelligence process.			Total
	Strongly disagree	Disagree	Neutral	
Manufacturing	7	4	1	12
Construction	5	2	1	8
Wholesale trade, commercial agents and allied services	2	1	2	5
Transport, storage and communications	10	7	1	18
Community, social and personal service	1	1	1	3
Electricity, gas and water	0	2	0	2
Retail and motor trade, and repair services	10	11	2	23
Catering, accommodation and other trade	11	7	1	19
Finance and business services	4	3	1	8
Total	50	37	10	98

Variables 5 and business location had a very strong positive linear association. Pearson's r for these two variables was 0.823. The cross-tabulation (see table 3) shows that six out of nine (66.67%) SMEs in Atteridgeville; four out of eight (50%) SMEs in Mamelodi; four out of seven (57.14%) SMEs in Winterveld; two out of seven (28.57%) SMEs in Eesterust; 20 out of 34 (58.82%) SMEs in the Pretoria CBD; two out of six (33.33%) SMEs in Ga-Rankuwa; four out of six (66.67%) SMEs in Rosslyn; five out of six (83.33%) SMEs in Mabopane; and 10 out of 17 (58.82%) SMEs in Silverton/Pretoria East hired people or other businesses to collect information on their behalf. Thus, the SMEs in Mabopane outsourced information collection more than the SMEs in other locations.

Table 3. Correlation between business location and information collection outsourcing

	We hire people or other businesses to collect information on our behalf.					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Atteridgeville	1	2	0	5	1	9
Mamelodi	2	2	0	4	0	8
Winterveld	1	1	1	4	0	7
Eesterust	3	2	0	2	0	7
Pretoria CBD	4	5	5	19	1	34
Ga-Rankuwa	2	0	2	2	0	6
Rosslyn	0	1	1	4	0	6
Mabopane	0	1	0	5	0	6
Silverton/Pretoria East	3	3	1	10	0	17
Total	16	17	10	55	2	100

There was a strong positive linear association between variables 6 and business type. Pearson's r for these two variables was 0.816. The cross-tabulation (see table 4) shows that 47 out of 55 (85.45%) close corporations, 22 out of 30 (73.33%) companies, 11 out of 14 (78.57%) partnerships and one out of one (100%) sole proprietorship did not have CI professionals in their businesses. Thus, the majority of the close corporations did not appoint CI professionals compared to companies, partnerships and sole proprietorships.

Table 4. Correlation between business type and hiring competitive intelligence professionals

		Sole proprietorship	Partnership	Close corporation	Company	Total
We have competitive intelligence professionals in our business.	Strongly disagree	1	7	26	11	45
	Disagree	0	4	21	11	36
	Neutral	0	2	5	3	10
	Agree	0	1	3	5	9
	Total	1	14	55	30	100

Variables 7 and business sector had a strong positive linear association. Pearson's r for these variables was 0.752. The cross-tabulation (see table 5) shows that although 41 (41%) of the SMEs in the different sectors opted to be neutral, three out of 12 (25%) manufacturing SMEs; three out of eight (37.50%) construction SMEs; three out of five (60%) wholesale trade, commercial agents and allied services SMEs; 11 out of 18 (61.11%) transport, storage and communications SMEs; one out of three (33.33%) community, social and personal service SMEs; nine out of 23 (39.13%) retail and motor trade, and repair services SMEs; 10 out of 19 (52.63%) catering, accommodation and other trade SMEs; and four out of eight (50%) finance and business services SMEs knew their competitors' strengths and weaknesses. Thus, the SMEs in the wholesale trade, commercial agents and allied services sector know more about their competitors' strengths and weaknesses than the SMEs in the other sectors.

Table 5. Correlation between the business sector and knowing competitors' strengths and weaknesses

	We know our competitors' strengths and weaknesses				Total
	Disagree	Neutral	Agree	Strongly agree	
Manufacturing	2	7	2	1	12
Construction	2	3	3	0	8
Wholesale trade, commercial agents and allied services	0	2	2	1	5
Transport, storage and communications	2	5	9	2	18
Community, social and personal service	0	2	1	0	3
Electricity, gas and water	0	2	0	0	2
Retail and motor trade, and repair services	2	12	5	4	23
Catering, accommodation and other trade	3	6	9	1	19
Finance and business services	2	2	2	2	8
Total	13	41	33	11	98

Variables 8 and business type had a strong positive linear association. Pearson's r for these two variables was 0.719. The cross-tabulation (see table 6) shows that 51 out of 55 (92.73%) close corporations, 28 out of 30 (93.33%) companies, 13 out of 14 (92.86%) partnerships and one out of one (100%) of sole proprietorships agreed that they were aware of who their competitors' customers were. Thus, companies know more about their competitors' customers than close corporations, partnerships and proprietorships.

Pearson's r for variables 10 and business sector was 0.944. Thus, there was a very strong positive linear association between these two variables. The cross-tabulation (see table 7) shows that almost all the SMEs in different sectors knew the prices of their competitors' products or services. Thus, SMEs in all the sectors compared prices.

There was a very strong positive linear association between variables 11 and annual turnover. Pearson's r for this correlation was 0.827. The cross-tabulation (see table 8) shows that although 42 SMEs opted to be neutral, 18 out of 50 (36%) SMEs with less than R1m; 23 out of 48 (47.92%) SMEs with R1m to R5m; and one out of two (50%) SMEs with a R6m to R10m annual turnover know who the competitor's suppliers are. Thus, SMEs with a higher annual turnover analysed information collected for CI more than those with a lower annual turnover.

Table 6. Correlation between business type and knowing competitors' customers

		Sole proprietorship	Partnership	Close corporation	Company	Total
We know who our competitors' customers are.	Neutral	0	1	4	2	7
	Agree	0	10	34	16	60
	Strongly agree	1	3	17	12	33
	Total	1	14	55	30	100

Table 7. Correlation between the business sector and analysis of collected information

	We know the prices of our competitors' products or services.			Total
	Neutral	Agree	Strongly agree	
Manufacturing	0	8	4	12
Construction	0	4	4	8
Wholesale trade, commercial agents and allied services	0	1	4	5
Transport, storage and communications	0	7	11	18
Community, social and personal service	0	2	1	3
Electricity, gas and water	0	1	1	2
Retail and motor trade, and repair services	1	11	11	23
Catering, accommodation and other trade	0	11	8	19
Finance and business services	0	4	4	8
Total	1	49	48	98

Table 4. Correlation between annual turnover and analysis of collected information

		Less than R1m	R1m to R5m	R6m to R10m	Total
We collect information about our competitors and analyse it.	Strongly disagree	1	1	0	2
	Disagree	7	7	0	14
	Neutral	24	17	1	42
	Agree	12	13	0	25
	Strongly agree	6	10	1	17
	Total	50	48	2	100

There was a very strong positive linear association between variables 13 and business location. Pearson's r for this correlation was 0.854. The cross-tabulation (see table 9) shows that almost all the SMEs in different locations gathered CI for decision-making. Thus, SMEs practice CI for decision-making irrespective of their location.

5. Discussion

It is evident from the findings that SMEs contribute to job creation and skills development as the majority of these SMEs employ at most ten employees. The majority of these SMEs have passed the do or die period of the first five years as most have been in operation for more than five years. With more than five years of operation, it comes as no surprise that the majority of these SMEs practice CI. Moreover, their owners or managers have many years of working experience and most of them have at least an undergraduate diploma. Their years of working experience and the knowledge acquired through education mean that they are able to make sense of some business transactions. The majority of these SMEs make at most R1m annually, and it is therefore no surprise that they practice CI informally and do not have a formal CI function and computerised CI system. However, it is surprising that more than half of these SMEs hire people or other businesses to collect information on their behalf. Information collected by these SMEs includes competitors' suppliers, customers, strengths and weaknesses and pricing. This information is analysed to produce actionable intelligence. The majority of these SMEs use CI to help in decision-making. These SMEs have their managers' support in practicing CI.

Table 5. Correlation between business location and practicing competitive intelligence to help in decision-making

	We gather competitive intelligence for decision-making.					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Atteridgeville	0	0	0	4	5	9
Mamelodi	0	0	0	4	4	8
Winterveld	0	0	0	1	6	7
Eesterust	0	0	0	0	7	7
Pretoria CBD	0	1	1	4	28	34
Ga-Rankuwa	0	0	0	2	4	6
Rosslyn	0	0	0	0	6	6
Mabopane	0	0	0	2	4	6
Silverton/Pretoria East	1	1	1	4	10	17
Total	1	2	2	21	74	100

While the majority of these SMEs did not have computerised CI, some SMEs in the electricity, gas and water sector had computerised CI. The majority of the SMEs that outsource the collection of information were located in Mabopane. The majority of the SMEs that know their competitors' customers are registered companies. Perhaps this is because companies are able to sell shares to the public to raise funds in order to acquire resources that help in remaining competitive. The majority of the SMEs that did not appoint a CI professional were close corporations. Maybe this is because most close corporations are run by individuals who appoint fewer employees. Irrespective of the sector they operate in, these SMEs know about their competitors' prices for products and services. The findings reveal that the majority of the SMEs that know their competitors' strengths and weaknesses operate in the wholesale trade, commercial agents and allied services sector. It is interesting to note that SMEs with a higher annual turnover analyse collected information more than those with a lower annual turnover. Perhaps this is because they have the funds to do so. Irrespective of their location, these SMEs practice CI to help in decision-making.

6. Conclusion

To survive in a global competitive business environment, these SMEs practice CI. However, these SMEs practice CI informally as they do not have a formal CI function or process or computerised CI system. The majority of the SMEs that have computerised CI systems operate in the electricity, gas and water sector. The majority of these SMEs do not appoint a CI professional and the majority of those that do not appoint a CI professional are close corporations. With the support of their managers, they outsource collection of information to people or other businesses. The majority of SMEs that outsource the collection of information are located in Mabopane. These SMEs collect information about their competitors' strengths and weaknesses, customers, suppliers and pricing. The majority of SMEs that collect information about their competitors' customers are registered companies. The majority of the SMEs that know their competitors' strengths and weaknesses operate in the wholesale trade, commercial agents and allied services sector. These SMEs collect information about the prices of their competitors' products or services irrespective of the business sector they operate in. SMEs with a higher annual turnover analyse collected information more than those with a lower annual turnover. SMEs practice CI to help in decision-making irrespective of their location.

Business type has an impact on the formalisation of CI practice and information collection by SMEs. The business location has an impact on the outsourcing of information collection for CI by SMEs and not on the reason for practicing CI. The business sector has an impact on the formalisation of CI practice and collection of information about competitors' strengths and weaknesses by SMEs. However, the business sector has no impact on the collection of information about competitors' products or service prices. The annual turnover has an impact on the analysis of the collected information.

SMEs should strive to practice CI formally as it improves the quality of CI. SMEs should appoint trained and qualified CI professionals as they are critical to the success of CI. Future research must be conducted to establish why SMEs outsource information collection. Moreover, research should be conducted to establish why SMEs practice CI informally.

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