The Role of Competitive Intelligence in Strategic Decision-Making: A Literature Review

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ABSTRACT
Competitive Intelligence (CI) is an important element in a company's strategic decision-making in the midst of increasingly fierce business competition. In business literature, CI has been recognized as a vital tool for understanding a company's external environment and analyzing competitors' strategies. However, there is still debate regarding the role and effectiveness of CI in strategic decision-making. This study aims to explore the role of CI in strategic decision-making through a comprehensive literature review. The research method used is a qualitative method by analyzing various articles and journals related to CI and strategic decision making. The discussion in this study includes the importance of CI in providing relevant information, the methods used in CI implementation, and its impact on the company's strategic decisions. The results show that a deeper understanding of the role of CI in the context of strategic decision making, as well as providing recommendations to improve the effectiveness of CI in supporting corporate strategic decisions. The implication of this research is to provide valuable insights for business practitioners and researchers in understanding the contribution of CI to the strategic decision-making process. This research is also expected to be a reference for companies in optimizing CI implementation to strengthen competitive advantage in the market.

Keywords: Competitive Intelligence, Strategic Decision Making, CI Ethics, CI cycle, Big Data.

INTRODUCTION

Competitive Intelligence (Competitive Intelligence) emerges as a vital component in the strategic planning and management process within the organization (Sassi et al., 2022). CI is becoming an interesting thing to discuss because the contribution of CI has increased over the past two decades and has become a challenge for business professionals and is beginning to be studied and implemented in large and small companies, in the private and public sectors, as well as in various industry contexts. Interest in CI was also observed among academic researchers. The existing literature reveals that CI is a multidisciplinary concept studied by researchers with different areas of expertise (management, marketing, information technology, decision support, and knowledge management) and discussed from different perspectives (as concepts, products,

processes, practices/disciplines, methods, and as systems). While there is great diversity in the pool of knowledge related to CI, there have been no empirical studies that touch on the practical aspects of the problem by developing complete CI solutions that can be delivered to decision-makers in anticipation of competitor reactions. The ever-evolving competitive environment is characterized by increased competition, rapid market changes, and globalization. Companies must increase their competitive advantage to survive. In order to gain an information advantage over competitors (knowing their capabilities, weaknesses, intentions, and potential moves), companies need to continuously monitor and process information related to the competitive environment of competitors. Therefore, Competitive Intelligence (CI) is emerging as a vital component of the strategic planning and management process (Sassi et al., 2022).

CI sits at the crossroads of art and science, involving the careful collection and analysis of data on competitor activities and strategies, it is an ongoing process that is integrated with all aspects of strategic planning, from go-to-market to product development. By leveraging the power of CI, businesses can predict market shifts, know competitor movements, make informed decisions, bridge the path to sustainable growth and success. CI is not only about competitive intelligence but also uses it strategically to formulate a strong competitive intelligence program. Competitive intelligence, often referred to as competitor intelligence or corporate intelligence, is the foundation of a comprehensive competitive intelligence strategy. CI is often associated with short-term profits, the real power of which lies in shaping the long-term strategic planning for a company's business. CI in an organization functions to improve information quality, accelerate decision-making, improve organizational business processes, increase effectiveness, reduce unnecessary costs, increase organizational awareness, increase information flow and dissemination, identify opportunities and threats, and save time (Oraee et al., 2020). CI is not just a tool for internal improvement and sales strategy; also plays an important role in improving operational efficiency with automated CI processes, such as those offered by various tools, which provide timely insights for organized operations. Consistent and regular data collection is the backbone of CI. Competitive intelligence is also referred to as enterprise intelligence, it is essential for businesses seeking insights to inform strategic decisions. A competitive intelligence practitioner is essential to understand the importance of systematically gathering competitive intelligence information, which goes beyond the capabilities of competitors to include a broader understanding of market dynamics, corporate espionage, and business competitor strategies. In a rapidly changing business landscape, operational efficiency is critical. Automated CI processes play a crucial role in providing timely insights that not only streamline operations but also improve strategic decision-making. Competitive intelligence is a tool that can be used by decision-making managers to improve their ability to deal with uncertain situations and increase profitability. It would be more beneficial to input business performance as a prediction factor, and environmental uncertainty as an additional CI factor (Wu et al., 2023).

CI analysis can make the business it runs is able to adapt proactively. A competitive intelligence analyst who is experienced in different types of competitive intelligence plays a crucial role in breaking down the information gathered through continuous monitoring. This proactive approach ensures businesses maintain a competitive edge and can respond quickly to shifts in the competitive landscape. Competitive intelligence refers to the systematic collection and analysis of data about competitors' activities and strategies. This continuous process is integral part of a comprehensive business strategy. By understanding the competitive landscape, companies gain insights that go beyond conventional market analysis. It's not just about knowing what competitors are doing; It's about understanding their movements and predicting market shifts. In the arena of battle, understanding your business opponents is just as important as understanding your own abilities. CI is key to unlocking deep insights into competitors' strengths and weaknesses, allowing businesses to strategically position themselves for profit. Collecting data regularly and continuously allows businesses to adapt proactively. A competitive intelligence analyst who is experienced in different types of competitive intelligence plays a crucial role in breaking down the information gathered through continuous monitoring. This proactive approach ensures businesses maintain a competitive edge and can respond quickly to shifts in the competitive landscape.

The purpose of Competitive Intelligence (CI) is to support managers in making strategic decisions. CI encompasses all activities of gathering, analyzing, and disseminating intelligence information about a company's products, customers, competitors, or other aspects related to the company's environment. However, it is important to underline that CI is different from business espionage; CI is ethical, legal, and legitimate. Competitive intelligence is an important foundation for companies in the process of developing competitive strategies (Lin et al., 2023). Another goal of CI is to create knowledge that is useful in supporting internal business and reducing risk based on the information obtained (Ranjan & Foropon, 2021). Competitive intelligence gathering methods such as surveys and expert assessments cannot provide a quick response to business user perceptions. A company's competitive strategy is a key component in strategic business management. By developing a good competitive strategy, companies can establish certain positions in the market and maintain those positions, thus helping companies to earn sufficient profits in a competitive market. Competitive intelligence intelligence is the first step in creating a competitive strategy. Competitive intelligence mining can help companies determine the difference between user needs and user perceptions of competitors' products and enterprise products, which is one of the core problems that companies must solve in creating competitive strategies.

Competitive Intelligence (CI) is a systematic process for collecting, analyzing, and interpreting information about the external business environment, competitors, and market trends with the aim of supporting strategic decision-making within an organization. Competitive

intelligence is more focused on the external of the company, inversely proportional to Business Intelligence which focuses on the internal of the company/organization. Business Intelligence (BI) focuses on collecting and analyzing internal company data such as customer data, supplier data, etc. While Competitive Intelligence (CI) focuses on competitor data (Ranjan & Foropon, 2021). The main goal of CI is to provide in-depth insight into the company's business and competitive environment, thereby enabling companies to identify opportunities and threats, as well as develop effective strategies to gain a competitive advantage.

Based on the background description above, the purpose of this study is to analyze the application of Competitive Intelligence (CI) in companies, especially in supporting the strategic decision-making process that focuses on the company's external environment, competitors, and market trends. This research aims to identify how companies can utilize CI to increase competitive advantage, as well as understand the role of CI in developing effective business strategies in the face of increasingly fierce competition. The benefit of this research is to provide insight for companies in applying Competitive Intelligence as a strategic tool to improve the effectiveness of managerial decisions, accelerate adaptation to market changes, and minimize business risks. This research will also contribute to the development of a more comprehensive CI practice, which focuses not only on collecting competitor data, but also on a thorough analysis of opportunities and threats arising from the external environment. The results of this study are expected to provide guidance for companies in designing and implementing CI programs that are more integrated and responsive to market dynamics.

RESEARCH METHOD

Research Approach

The method that will be used by the researcher is to use qualitative research. Qualitative research is a research approach to understand the characteristics of individuals or groups of people to social problems. This research process uses questions and procedures, collecting data in the environment of the object to be researched and making an interpretation of the meaning of the data obtained (Creswell & Poth, 2016). Qualitative research is carried out by collecting a variety of empirical materials, such as case studies, personal experiences, curriculum vitae, interviews, observational, and historical history (Crozier et al., 2018).

Qualitative research involves four main functions, namely contextual functions, explanatory, evaluative, and generative functions. In this study, the researcher's focus is on the explanatory function, which aims to explain how competitive intelligence can influence and contribute to the strategic decision-making process within an organization or company. Includes an explanation of how competitive intelligence is collected, analyzed, and used in the context of strategic decision-making, as well as its impact on the organization's performance and competitive position.

RESULT AND DISCUSSION

Definition of Competitive Intelligence

CI (Competitive Intelligence) is a process that includes elements of collecting, processing, analyzing, and disseminating information into intelligence that can be used as a basis for decision-making, thus providing a competitive advantage for the company (Köseoglu et al., 2021). Competitive intelligence, from an organizational point of view, can be defined as the collection, analysis, interpretation, and dissemination of strategic information at the right time to be used in the decision-making process (Ranjan & Foropon, 2021). Only organizations with competitive features can gain a competitive advantage in improving customer experience, maintaining employee loyalty, and achieving better performance than ever before. There are many sources for business managers to obtain information about competitive intelligence, ranging from internal and external sources, questionnaires, expert assessments, and social network analysis (Lin et al., 2023). Getting accurate and timely competitive intelligence can help companies develop competitive strategies that match their targets. This puts the company in an advantageous position in terms of competition with competitors (Lin et al., 2023). According to Strategic and Competitive Intelligence Professionals (SCIP) defines CI as a systematic and ethical program for collecting, analyzing, and managing external information that can influence a company's plans, decisions, and operations (Sassi et al., 2022). The purpose of CI is to support managers in the company's strategic decisions. CI consists of all the activities of gathering, analyzing, and disseminating intelligence about the company's products, customers, competitors, or any other aspects related to the company's environment. However, this should not be mistaken for business espionage; because CI is ethical, legal, and legitimate (Sassi et al., 2022).

The concept of CI has evolved gradually since the 1970s. Interest in CI arises with the collection of CI itself, and the practice of skill development in information acquisition. Then, in the 1980s, CI became increasingly important and business professionals began to implement CI processes in organizations. In the 1990s, interest was more focused on strategic decision-making, which provided direct input to bottom line, the role of information technology, CI technology, supply and demand, and counter-intelligence. In the last two decades, the issue of CI has become a major issue that has core capabilities, such as parallel process management, intelligence infrastructure for multinational companies, CI as a learning material, and network analysis. Today, the concept of CI is studied and implemented in large and small companies in the private and public sectors, and in different industry contexts (Sassi et al., 2022). CI has become more well-known and considered very important by business professionals who recognize its benefits for organizations/companies, as well as have a positive impact on company performance. CI (Competitive Intelligence) provides a foundation for better decision-making, which in turn leads to the achievement of the set business goals. Companies that take a proactive stance

(anticipating what will happen instead of just reacting) can better understand external influences, make informed and timely decisions, and achieve a better market position (Sassi et al., 2022). Interest in CI is not only among business professionals but also among academic researchers who aim to understand the concept, explain it, and develop methods, approaches, systems, and solutions to deal with it. A thorough literature review shows that most research studies have understood the concept of CI, its process, goals, and benefits. The existing works are less than experiments and practical studies that focus on developing CI solutions in terms of anticipating competitor reactions.

Competitive Intelligence Process

Simply put, Competitive Intelligence is the process of collecting, analyzing, and disseminating information about competitors and the business environment to gain a competitive advantage. The CI process includes monitoring competitors with the aim of providing intelligence information that can be used as a basis for taking action for the organization (Ranjan & Foropon, 2021). The CI cycle consists of obtaining data (acquiring), collection (Gathering), evaluate (Evaluating), and analyze (Analyzing) unformatted and raw business data, and turn it into ready-to-use intelligence for policymakers. The goal is to understand the strengths and weaknesses of competitors, identify opportunities and threats in the market, and develop more effective strategies. The benefits of competitive intelligence include increased market share, profitability, and more successful new product launches. The sources of information are diverse, such as internal, external data, questionnaires, and data analysis. The competitive intelligence process includes planning, data collection, data analysis, information dissemination, and follow-up. The challenges include collecting accurate data, analyzing data effectively, protecting confidential information, and ensuring the ethical use of competitive intelligence. Organizations that succeed in competitive intelligence have a culture that supports the collection and use of information, trained teams, access to a variety of information sources, and clear processes for analyzing and disseminating information. Competitive intelligence is an essential tool for companies to gain a competitive advantage in a competitive market.

When reviewing the literature related to CI, researchers found that CI is a multi-disciplinary concept that is studied by researchers with a variety of different expertise and viewed from different perspectives, such as From a management perspective to explore and describe its concepts, related variables, processes, and activities (García-Madurga & Esteban-Navarro, 2020). As a product with an emphasis on the development of methods and techniques to produce the expected results (Kula & Naktiyok, 2021). As a CI practitioner or profession based on a code of ethics (Köseoglu et al., 2020). As a tool or system in which the objective is to develop intelligence systems and support decisions for companies (García-Madurga & Esteban-Navarro, 2020).

Competitive Intelligence Cycle

The intelligence cycle is the process of developing raw information into intelligence products for use by policymakers who have power in decision-making. There are several opinions regarding the intelligence cycle cycle, some consist of four steps, five steps, and some have a six-step cycle. Some models of the intelligence cycle are shaped like clockwise in the shape of a circle, and some are in opposite directions. According to the Director of National Intelligence (DNI), the intelligence cycle consists of 6 (six) processes (Jensen III et al., 2022) that is:

1. Planning and direction, setting consumer intelligence requirements and planning intelligence activities accordingly. The planning and direction steps determine the stages for the intelligence cycle.

2. Data collection. Gathering the raw data needed to produce the finished product. Data collection is carried out to collect raw data related to five basic intelligence sources such as Basic Intelligence (Geospatial Intelligence / GEOINT), Human Intelligence (HUMINT), Open Source Intelligence (OSINT), and Signal Intelligence (SIGINT).

3. Processing and exploitation, converting raw data into a comprehensive format that can be used for the production of finished products in the form of reports. This step of processing and exploration involves the use of highly trained and specialized personnel and high-tech equipment to transform raw data into usable and understandable information.

4. Analysis and production. Integrate, evaluate, analyze, and prepare processed information for inclusion in finished products. The analysis and production steps also require highly trained and specialized personnel (analysts) to give meaning to the processed information and prioritize it against known requirements.

5. Dissemination. Sending product reports to the company/organization's stakeholders. Policymakers who request reports in finished products, usually via electronic message. The dissemination of information is usually done through means such as websites, emails, and hardcopy distribution.

6. Evaluation, continuously getting feedback throughout the intelligence cycle and evaluating that feedback to improve each individual step and the intelligence cycle as a whole. Evaluation and feedback from consumers are essential for those involved in this intelligence cycle. The intelligence cycle will later adjust and improve activities and analysis in more detail to meet the changing needs of consumers.
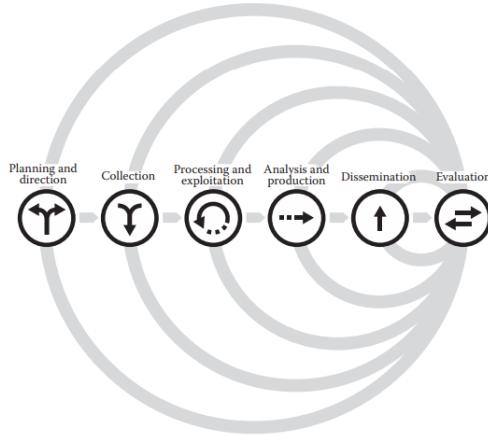
Figure 1. Intelligence cycle according to the Director of National Intelligence (DNI) Competitive Intelligence Collection Methods

In the context of Competitive Intelligence, data collection methods have a crucial role in supporting the company's strategic decision-making. Traditional methods such as observations, questionnaires, mass media, images, official reports, interviews, and Benchmarking has long been an important instrument for understanding the market and competitors (Grigorescu, 2020). Observation provides first-hand insight into competitor activity, while questionnaires and interviews allow companies to gain insights from customers and other stakeholders. On the other hand, modern methods such as big data analysis and semantic data warehouse (Casarotto et al., 2021), social media analysis, creating brief summaries of some relevant text documents, the use of the internet as an open source CI (Calof & Sewdass, 2020); (Maune, 2021), and artificial intelligence / Artificial Intelligence (AI) offers the ability to collect and analyze large volumes of data quickly and efficiently.
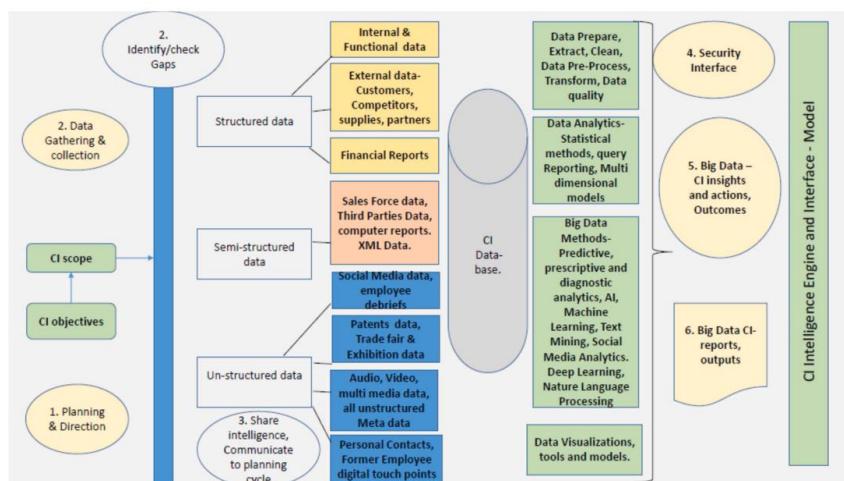

Figure 2. Conceptual framework for the use of big data methods for CI processes
Source: (Ranjan & Foropon, 2021)

Big data analysis serves to identify previously undetected patterns (see Figure 2), while social media analytics can provide insights into market sentiment realtime. In the beginning, the use of technology Internet of Things (IoT), big data, and cloud computing (Cloud Storage) has created good value for customers and the company. Using big data methods can increase the impact of CI in gathering information from various big and diverse data sources to gain useful insights, trends, patterns, and knowledge to predict, analyze, and understand competitor scenarios (Ranjan & Foropon, 2021). Recently, Competitive Intelligence (CI) has been attracting more attention because of the amount of data available in the open source through mobile phones, social media, blogs, text messages, emails, and other digital communications; data from these sources is critical in building CI (Ranjan & Foropon, 2021). The use of artificial intelligence (AI) is able to automate processes and increase efficiency in data collection and analysis. The combination of traditional and modern methods can provide comprehensive data on the business environment, companies are able to develop appropriate strategies and are responsive to market and competitive changes.

The biggest misconception mentioned by organizations in the use of Big Data analytics is the lack of experience, awareness, and knowledge about Big Data in CI among existing CI staff. Senior managers are worried about developing, monitoring, and implementing counter-intelligence tactics and dashboards to improve CI. These findings were reflected in all interviews. First, 21 participants (age 44, female) stated: We are recruiting IIM [India Institute of Management] graduates specifically to collect CI through Big Data. But they weren't equipped with the right analytics approach, and we ended up terminating their contract. The employee is quite expensive, but the insights generated are not there. Second, another participant (age 58, male) observed: "How can we trust the internet? The quality of the data is highly questionable, and making decisions based on those insights is skeptical." Third, another participant (age 46, female) stated, "We use basic Big Data such as analytics, competitor analysis, SWOT, segmentation analysis, 5 strengths analysis; However, we haven't used this in real-time on larger data. We want to use advanced text mining, natural language processing, etc., all of which are related to Big Data.

Table 1. Methods used in CI.

CI Methods Used	Percentage	Rank
Competitor analysis	58.8%	1
Customer segmentation	52.9%	2
SWOT analysis	47.1%	3
Industry/5 forces	35.3%	4
Financial analysis	29.4%	5
Win/loss analysis	23.5%	6
Benchmarking	17.6%	7
Others	17.6%	7
Scenario analysis	11.8%	9

Data Dissemination Points	Percentage	Rank
Presentations/staff briefings	82.4%	1
Printed alerts/reports	52.9%	2
Newsletters	41.2%	3
Company intranet	41.2%	3
Central database	29.4%	5
Threat/Opportunity	**Percentage**	**Rank**
New customer/target audiences	76%	1
New competitors	52.9%	2
Customers' DEMANDS	41%	3
Industry competitors	23%	4
Potential suppliers	17%	5
Staffing Options		**Percentage**
Project team in house/external		64%
Project team/employees		35%
External consultants		5%
Sources of CI in Firms	**Percentage**	**Rank**
Commercial databases	64.7%	1
Industry experts	64.7%	1
Customers	58.8%	3
Publications (print/online)	52.9%	4
Social media	17.6%	5
Internal data	11.8%	6
Company employees	5.9%	7
Criteria for CI Effectiveness	**Percentage**	**Rank**
New or increased revenue	35%	1
New products or services deployed	34%	2
Cost savings/avoidance	23%	3
No measure used	20%	4
ROI calculation	17%	5
Big Data Tools/Software Tools Used		**Percentage**
Yes		64.7%
No		11.8%
Challenges in Adopting Big Data Applications in CI	**Percentage**	**Rank**
Developing, monitoring, and implementing counterintelligence tactics	52.9%	1
Capturing the competitive information held by the firm's employees	41.2%	2
Developing an integrated competitive insights dashboard	29.4%	3

Source: (Ranjan & Foropon, 2021)

From the data presented (see Table 1), it can be concluded that organizations use a variety of methods for competitive intelligence (CI), including competitor analysis, customer

segmentation, SWOT analysis, and industry analysis. The main sources of information for CI include commercial databases, industry experts, customers, and internal company data. There are challenges in adopting Big Data applications in CI, with most respondents having difficulty coping with them. However, there are still efforts to develop, monitor, and implement counter-intelligence tactics, as well as capture competitive information possessed by company employees. A holistic and diverse approach is needed to ensure the effectiveness of CI and make optimal use of the potential of big data.
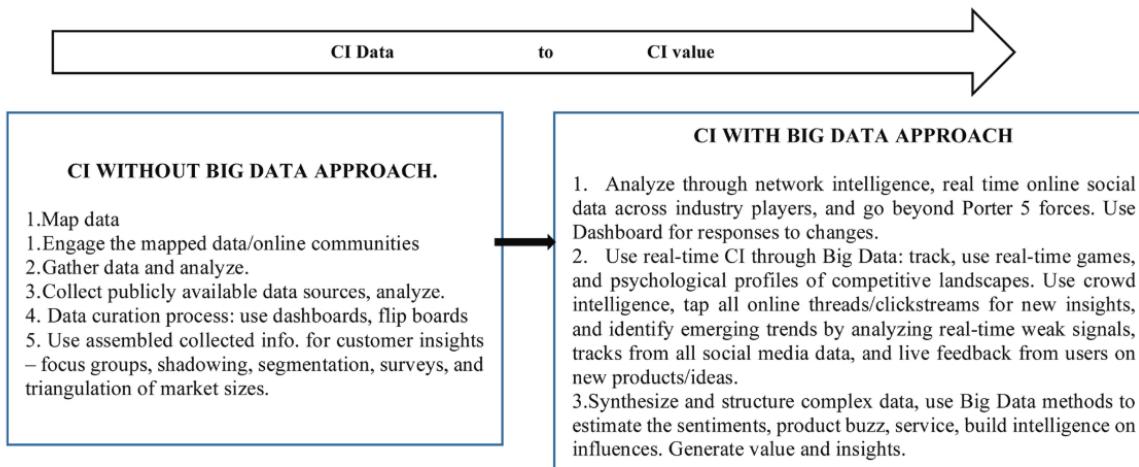

Figure 3. Approach to using Big Data in CI
Source: (Ranjan & Foropon, 2021)

Based on Figure 3, it can be seen that the CI method carried out without a big data approach involves steps such as data mapping, the use of data that has been mapped, data collection and analysis from various sources, and the use of publicly available data sources. On the other hand, the CI approach with a big data approach leverages technology to analyze data networks, collect online social data in real-time from various industry players, use real-time analysis through big data, and synthesize and build complex data structures to support more effective decision-making. With this approach, companies can optimize the use of data in generating deeper insights and be responsive to changes in the business environment.

Several methods are applied to translate large volumes of information into valuable knowledge that can be implemented in CI, depending on the nature of the data (structured, semi-structured, or unstructured), including:

a) Data Mining and Text Mining: Using a data warehouse system to store structured and semi-structured data from a variety of sources, then applying data mining techniques to identify useful patterns and trends (Casarotto et al., 2021).

b) Web Scraping: Uses automated tools to extract information from websites and online databases. This can help in the extensive and continuous collection of data from public sources such as forums, news sites, or social media platforms.

c) Competitor Analysis Tools: Use specialized software to analyze competitors, including data about products, marketing strategies, or brand reputation. This allows for a direct comparison between the performance of a company and its competitors.

d) Sentiment Analysis: Analyzing the opinions and sentiments contained in the text, both from internal and external sources, to gain an understanding of the market's perception and response to a company or its products.

e) Machine Learning Algorithms: Using machine learning algorithms to analyze and understand patterns in data, both for prediction and for data grouping. This allows for the identification of complex patterns and more accurate predictions.

Despite the diverse knowledge from previous research work related to CI, there have been no studies that concern the practical aspects of the problem by developing solutions that can be conveyed to decision makers. Previous research has only contributed theoretically by presenting: surveys (Calof & Sewdass, 2020), a model, conceptual framework (Conceptual framework), the relationship between CI and other concepts such as innovation and strategic thinking (Strategic Thinking), as well as CI levels according to the level. To address this gap, it is critical to develop a practical approach that can be implemented in a tangible way by decision-makers (Stakeholders), can be achieved by integrating CI into strategic decision-making processes, identifying market opportunities and threats, and evaluating the potential impact of strategic decisions. This approach allows organizations to leverage information competitively to gain a competitive advantage and position their business for long-term success. For example, CI can be used to identify market gaps and opportunities, by understanding what competitors are doing (both good and bad), organizations can identify areas where they can differentiate themselves in the market. CI can also help assess the strengths and weaknesses of competitors, so that if a competitor has difficulty providing services to customers, the company can prioritize improving its customer service to be different from other competitors. Additionally, CI can be used to assess the potential impact of strategic decisions, so that if an organization is considering entering a new market, companies can use CI to understand the competitive landscape and potential barriers. Create a feedback cycle (feedback) is essential to continuously incorporate new information into the company's decision-making. The feedback cycle includes regular updates to the CI strategy, iterating on competitive landscape analysis, and gathering more information from primary and secondary sources.

By using CI effectively, organizations can gain a competitive advantage in their industry and set their business up for long-term success. Since CI can be used by various parties with different needs within a company, CI has a broad concept and the activities associated with it depend on the goals achieved. For example, when implementing CI in a company, the objectives consist of: (i) identification and detection of market trends, opportunities, strengths, risks, and threats (ii) anticipating competitor actions (iii) studying competitor successes and failures (iv) learning new

technologies, products, and processes; and (v) monitor political, legislative, and regulatory changes in areas affecting the business (Sassi et al., 2022). Getting accurate and precise CI information can help companies develop competitive strategies that suit the company's targets. However, this method is not able to provide a quick response in providing perception and feedback users related to the company's competitive situation and conditions. With the speed of product updates, even in large manufacturing industries such as the automotive industry, the product update cycle has been shortened from 3–5 years to 1–2 years, and some automakers even launch several new products in the same year. Companies need information collection and processing systems that provide quick feedback on user perceptions of the company and its competitors. This system can provide decision support for companies to develop competitive strategies.

Information collection is the most important basic thing. In competitive intelligence, the quality of the information collected directly affects the quality of competitive intelligence products (Grigorescu, 2020). The intelligence community (Intelligence Community) uses the suffix "INT" which means "Intelligence" to describe various methods of intelligence gathering. There are several categories of intelligence gathering that are only owned by the Government and the State Intelligence Agency, but not by private companies/organizations, namely:

Human Intelligence (HUMINT). Humint is the oldest method of collecting intelligence data, a term used in the world of intelligence and the world of security to refer to one of the methods of collecting information that involves humans as a source of information. HUMINT involves the use of intelligence agents who directly interact with other people or entities to obtain important information, such as information about the intentions, activities, and plans of a particular opponent or target. The use of humint is not only from secret sources, open source can be very valuable information for intelligence agents in obtaining competitive intelligence information.

a) SIGINT (Signal Intelligence) is a branch of intelligence that focuses on collecting, analyzing, and interpreting information from electronic signals and communications. It includes the monitoring and collection of electronic signals such as telephone conversations, text messages, internet data, and other radio transmissions that can provide insight into the activities and intentions of a particular adversary, organization, or individual. SIGINT activities involve the use of advanced equipment and technology to detect, monitor, and analyze electronic signals. This can include intercepting communications, tracking radio signals, cracking codes, and other techniques to obtain relevant information.

b) GEOINT (Geospatial Intelligence) is a type of intelligence that focuses on collecting, analyzing, interpreting, and disseminating geographic and spatial information. It combines geographic data, such as maps, satellite imagery, geodetic data, as well as other geographic information, to gain insights into the physical environment and human activities in different geographic regions.

c) MASINT (Measurement and Signature Intelligence), one of the disciplines in the world of intelligence that focuses on collecting, analyzing, and interpreting data resulting from measurements and signatures that are different from an object or phenomenon. MASINT differs from other branches of intelligence such as SIGINT (Signal Intelligence) or HUMINT (Human Intelligence), as it focuses more on physical characteristics and measurements than human communication or information. In contrast to other methods of intelligence gathering, MASINT developed in the 20th century when technology was evolving to be more sophisticated.

d) OSINT (Open Source Intelligence) is a type of intelligence that focuses on collecting, analyzing, and interpreting information that is openly and publicly accessible. The information in OSINT comes from open sources such as newspapers, websites, social media, books, government publications, and other public sources. There is a view that only classified information can be categorized as good or useful information. A lot of very useful information is unclassified and publicly available. Especially today, in a world where we are flooded with information. There are thousands of newspapers, television stations, and radio networks in operation. Plus all the information is available on the Internet. The difficulty for the intelligence community is often not due to a lack of information, but to having to sort out really valuable information from useless.

Intelligence Ethics in the Perspective of Competitive Intelligence

The term ethics has 2 perceptions, namely ethics as an examination and analysis of concepts, theories, and moral principles that guide human behavior and decision-making. Then, ethics becomes a value assessment that assesses the truth or untruthfulness of a certain action. Ethics and Intelligence are essentially oxymoronic (as opposed to each other). Intelligence activities are often controversial, such as spying, confidential information gathering, and possibly actions that violate human rights or certain ethical norms. Often when intelligence ops are outside the boundaries of accepted norms of ethics. On the other hand, ethics is very important in the world of intelligence. Ethics is considered to provide guidelines and limits for intelligence actions, help prevent abuse of power, and ensure that the operations carried out are in accordance with moral and legal values. When intelligence engages in activities of "lying, deceiving, manipulating and sometimes committing much worse acts". Are intelligence and ethics compatible?. A former British official said he "felt there was a problem with ethics" and considered ethics to be an "obstacle in the intelligence system".
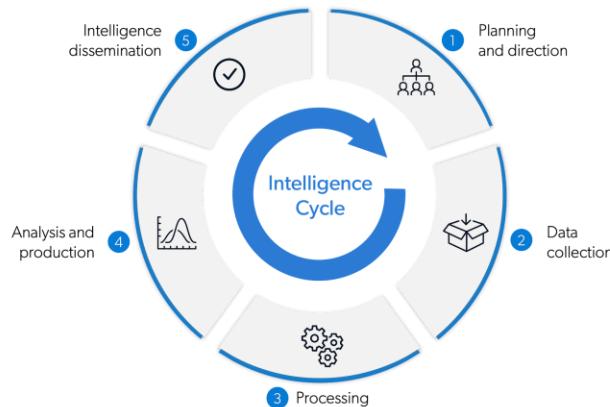
Figure 4. Intelligence Cycle

a) Planning and direction, at this stage decision-makers / stakeholders must have a role in determining the priority of intelligence activities, determining an activity / task that is appropriate and legally valid in justifying the existence of intelligence activities, and recruiting agents to carry out their duties. Stakeholders must also consider the safety and security of their citizens. Then, authorized policymakers have an obligation not to put excessive pressure on intelligence agents to obtain intelligence at all costs, as it may ignore ethics and/or violate the law. In addition, planning and direction also includes recruitment and training process activities. Intelligence agencies must have good ethical standards in the recruitment process. Drexel Godfrey recommends that ethics tests should be part of the recruitment process at an intelligence agency. Stephen Marrin and Jonathan Clemente emphasized the need for ethical licensing or certification processes in the intelligence community, such as procedures used in other professions such as doctors.

b) Data collection, information collection activities are divided into several ways: IMINT, SIGNINT, HUMINT, and OSINT. Especially HUMINT, sometimes in the collection of intelligence information, the use of aggressive interrogation techniques and the existence of torture, this problem is justified in the effort to collect very important information, especially the collection of information of a terrorist nature. There are differences in pros and cons related to the use of violence ethics in information collection. According to Alex Danchev and Alex Bellamy, violence is however unjustified and violates human rights provisions. On the other hand, according to Dershowitz, the method of violence can be ethically justified if a target has information that can save the lives of many people.

c) Analysis and Production, at this stage the data and information collected are processed to produce intelligence products. Turning the collected pieces of information into something that can be used by policymakers. The results of this analysis can be in the form of written reports, oral submissions, and brief memorandums. The ethical obligations that must be considered are (a) avoiding the politicization of intelligence (b) not justifying illegal and inappropriate changes in the processed intelligence information.

d) Intelligence Dissemination, is the process of disseminating intelligence information that has been collected to the authorities or who need it for national security purposes. The purpose of intelligence dissemination is to provide a broader understanding to decision-makers and responsible parties, so that they can make better decisions and take effective actions based on existing intelligence information. There are 4 (four) ethics that must be met when disseminating intelligence information, namely: (a) The truth of intelligence information to the authorities (b) Sharing intelligence information with the outside world (c) Sharing intelligence with domestic institutions (d) Prevention of the dissemination of intelligence information without permission.

The challenge in this area is to find a balance between the demands of national security and the ethical values that underlie society. At the planning and direction stage, policymakers must be able to set priorities for intelligence activities, determine an appropriate and legally valid activity/task in justifying intelligence activities, recruit agents to carry out duties, recruitment and training process activities, and intelligence institutions must have good ethical standards in the recruitment process. At the data collection stage, information collection activities are divided into several ways: IMINT, SIGNINT, HUMINT, and OSINT. Especially HUMINT. Sometimes in the collection of intelligence information of a state nature, the use of aggressive interrogation techniques and the existence of torture, this problem is justified in the efforts to collect very important information, especially information collection in the field. In addition, a field intelligence agent must be able to comply with all applicable laws, both domestic and international laws, provide accurate and relevant information, avoid conflicts of interest between intelligence agencies, provide recommendations and conclusions honestly, correctly and realistically in carrying out their duties, and faithfully comply with and submit to the organization's policies and objectives.

CONCLUSION

The conclusion in this study is the role of Competitive Intelligence (CI) in the context of strategic decision making, it can be concluded that CI makes a significant contribution in helping companies face the challenges of increasingly complex business competition. CI plays a role in providing relevant and timely information about the company's external environment, including competitor analysis, understanding market trends, and industry changes that can affect business strategy. With this information, companies can make better and informed strategic decisions, and be able to respond to market changes more quickly and effectively. The contribution of this research is to provide a deeper insight into the importance of developing an effective and integrated CI strategy. This research also highlights the importance of utilizing advanced information technology and data analysis tools to improve the quality and accuracy of information obtained through CI. The role of CI is expected to continue to grow and become

increasingly important in the company's business strategy in the future. Along with the development of technology, companies are expected to be able to collect, analyze, and utilize data more efficiently through CI, which in turn will improve their understanding of the market and competitors, and support smarter and more timely strategic decision-making. Therefore, investment in the development of CI capabilities and the use of the right technology can provide significant benefits for the company's long-term growth and success.

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