

Understanding Competitive Intelligence for the Performance of Pharmaceutical Companies

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Article Type: Article

Article Citation: xxx, 2022; 7(02), 51-61. DOI: 10.52184/isbrmj.v7i02.000

Received date: October 23, 2022

Accepted date: November 28, 2022

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Abstract

The main aim of the present study is to assess what role CI (Competitive Intelligence) has in the performance of pharmaceutical firms. Do the firm's logistics, marketing, and discovery get affected by the impact of CI? How are the CI activities organized with a firm? How do CI usage and dissemination take place in global pharma companies? In the 21st century, there are a lot of companies that try to implement CI and MI practices but still face challenges, the pharmaceutical industry being one of them. Till date only 69% of pharmaceutical companies rely on competitive intelligence for their decision-making, which leads to a lot of potential pharma companies lagging in the competition, thus making them unable to come up with a successful drug launch and development. This hampers not only the firm's market share but also can lead to an effective medication not being able to launch in the market.

Design/Methodology: The paper uses stratified qualitative analysis of the implications of CI in the pharmaceutical and healthcare industry.

Findings: The findings of this study lead to the unmet needs existing in the global pharmaceutical industry. It aids in analyzing the gaps and the missing links of previous research conducted for CI and what more needs to be done to fill in this gap in the market, competitors, and research that is taking place in today's pharmaceutical industry.

Keywords: Competitive Intelligence, Market Intelligence, Pharmaceutical research, Key intelligent question, Strategic planning, Business intelligence

1.0 Research Objectives

- The paper revolves around a comprehensive literature review for understanding the role CI (Competitive Intelligence) has in the global pharmaceutical and healthcare scenario

- To analyze how CI monitoring is a need for a firm's business performance and especially in the pharma domain, where it is required to carry out day-to-day strategic planning of clinical trials, manufacturing, and launch of a novel drug
- To understand the importance of the history and present scenario of CI, through a detailed literature review survey of the past 10 years in the history of CI

2.0 Introduction

Biotech and Pharmaceutical CI is a systematic procedure involving the ethical and legal collection and controlled dissemination of actionable information for decision-makers. CI is a need for every pharma company which monitors the competitors' objectives, strategies, assumptions, and capabilities. For any business strategy to develop, CI is a must for any industry, especially the pharma domain.

There are five cycles of pharmaceutical CI:

- Direction and Planning: Identify and disseminate the key intelligent topics
- Collection: Collection of Corporate intelligence and reporting
- Information processing and storage: developing enhanced knowledgebase using primary intelligence
- Analysis and Reporting: Making corporate intelligence both understandable and actionable

In the context of the global expanding market, this research investigates the connection between CI techniques and company performance. CI is a dynamic process that entails continuously gathering, analyzing, and applying intelligence about rivals and the wider business environment from openly accessible, non-proprietary data sources and translating it into knowledge. (Blenkhorn and Fleisher).

With an aim to flourish in the global pharmaceutical market, it is very essential to stay up to date with all day-to-day developments in one's industry and also every industry aspect that can affect an individual's business. Furthermore, it has been observed that due to an increase in generics and biosimilar competitions, firms compete fiercely and keep their pipelines strong in the face of fierce and rapid innovation, with the changing and evolving patient need, and with the patent expirations. Hence, in such an evolving and rapidly dynamic environment, keeping a constant tab and eye on the competitor is imperative. This is only achieved through effective competitive intelligence which should be comprehensive, reliable, and tailored to meet the demands of the pharmaceutical companies. (David W Pickton, n.d.).

A pharmaceutical competitive and market intelligence's primary aim is to help the industry gain valuable insights into different sectors of the pharmaceutical industry. It is a process through which firms can make strategic decisions and eventually enhance revenue. The competitive intelligence process includes the leaders of the industry to garner timely insights to make decisions that steer product and value development and determine a clear route to corporate success. For any pharmaceutical industry to identify challenges and bottlenecks in any area for successful product development, proper analysis, and evaluation

are required which comes through the implementation of competitive intelligence by the pharmaceutical companies. Areas such as proper execution of clinical trials, analysis and evaluation of competitor drugs, and coming up with an out-of-the-box solution for it.

There can be a number of logistic and development challenges, including patent expiration of a drug which is a major barrier for any pharmaceutical company, this can be resolved and accomplished by various competitive intelligence services such as primary competitor and targeted/potential customer identification, analysis of demand in the market, corporate, and business investor analysis/monitoring and many more.

2.1 CI in the Pharmaceutical Process

Pharma's competitive intelligence is future-targeted in a manner that it possesses a forward approach and a predictive method to investigate the upcoming actions of any competitor. Some examples of pharmaceutical marketplace intelligence consulting consist of evaluating the competitor's R&D strategy, unique product improvement strategy, enterprise improvement strategy, product advertising strategy, pricing strategy, etc.

Pharma's competitive intelligence, by being completely focused on the present, plays a major and active role in analyzing the current scenarios to reshape personal growth.

2.2 Theoretical Perspective of CI in Pharma

In the context of the global increasing market, this research investigates the connection between aggressive intelligence (CI) strategies and corporation performance. CI is represented as a dynamic method that involves constantly gathering, analyzing, and making use of intelligence approximately opponents and therefore the overall commercial enterprise surroundings from publicly accessible, non-proprietary information assets and translating it into knowledge (Richardson & Luchsinger 2004, Bickerstaff et al. 2006).

A primary hassle in handling the enterprise is a discount, in the quantity of the product output in comparison to expenditure for R&D, the enterprise may have additionally reached saturation factor in phrases of the wide variety of elusive "blockbuster" capsules that may have evolved. So, with a little promise of locating a new "blockbuster" drug, companies are focusing on their product pipelines, but the fee for R&D is growing. Coupled with this, is the practical reality that lots of the "blockbuster" capsules that have evolved with inside the 80s & the 90s are presently coming off patent, and as such corporations can count on stiff opposition from the usual stage of the producers. It is inside this context that an improved stage of CI hobby isn't simplest desirable, but essential.

Porter (1980), adopts an external environmental viewpoint to intelligence collection and contends that any Executive who is concentrating on the future should formulate or strategize to address the following questions.

- What is the driving factor for the industry or what is steering my industry?
- What probable actions are the rivals likely to implement and what is the best way to respond?

- How will the pharma industry evolve, and in what way can a firm position itself in the long run?

There are many perspectives on precisely defining competitive Intelligence. It's going to be differentiated among competitive intelligence and competitor intelligence which has been a topic of debate for various authors in the past, which came down to the conclusion that intelligence is the price that is delivered for strategic decision-making technique, through the collection and reading of records, whilst CI is the call given to the records collected referring to real competition. There are many perspectives as to precisely define competitive Intelligence. It may be differentiated among competitive intelligence and competitor intelligence which has been a topic of debate for various authors in the past, which came down to the conclusion that intelligence is the price that is delivered to the strategic decision-making technique through the collection and reading of records, whilst competitor intelligence is the call given to records collected referring to real competition (Jaworski, n.d.).

3.0 Review of Literature

Health is a concern of humanity looking for higher excellence in life, and aggressive intelligence assist in this remedy to identify gaps and lags. In the past 10 years, there have been many researchers presenting their notion of CI in health and pharma, however, the global pharma industry still lags behind its research on how the actual driving factor: "Competitive Intelligence" is leading the way in new developments. Analysing, the last 10 years of research, we can observe that CI has always been a pivotal part of the healthcare and pharma industry, with its various tools and techniques coming into implementation in some way or another throughout the global pharma market.

1. Rouach and Santi (2001) talks about the growing importance of CI as a management practice. They talk about how CI should be implemented only through the five intelligent attitudes. The sleepers, reactive attitude, active attitude, assault attitude, and warrior attitude. Even in different industries like life science, these attitudes always come into use. CI is an art and science which adds value to the information which can be processed through simple information gathering to intelligence production (Rouach & Santi, 2001)
2. Calof and Wright (2008) trace the history of the CI domains and identify the academic, practitioner, and interdisciplinary perspectives on CI practice. They specialize in the identification of linear relationships that the CI has with strategic planning and marketing activities. The data supports the idea that CI is an activity that mainly consists of strategic management and reading about the environment. The competitive intelligence framework is continuously expanding to include new disciplines of research and action. (Calof & Wright, 2008)
3. Bartes (2010) speaks about the perception of CI regarding its relationship with business intelligence. The author of this work develops his concept of CI. The author outlines his notion of CI based on the principles of state intelligence services, with the

exception that only legal information sources and lawful working techniques are considered. His notion of CI is based on a comparison between the two definitions of the term “information”. The author believes that CI requirements, it is required to comprehend the term information not only in its sense as an objective entity but also in relation to the receiver (analytics), who may interpret the substance of the data based on his or her experiences and knowledge (Bartes, 2010).

4. Colakoglu (2011) investigated the literature and applications in the corporate sector about CI, particularly assessing, and emerging competitive intelligence. Recent research demonstrates that effective CI practitioners are learning about CI via active reading, performing, listening, and discussing. To properly implement the sustainable intelligence cycle, practitioners need to have a certain set of skills, knowledge, competencies, and abilities. CI development and assessment process will improve by using CI techniques. Both of the problems will help by benchmarking the present applications. Systematic research may also help achieve both objectives. Finally, results will eventually be produced through leadership and constant support. While CI challenges are growing, the legal framework of CI is collected, in accordance with CI experiences. The future of CI requires finding legal answers and solutions to newer issues. Consistent growth is essential to survive in this competitive area (Colakoglu).
5. Aspinall (2011) talks about the importance of CI within the biopharmaceutical industry. CI is often defined as the process of collecting, analyzing as well as interpreting the internal as well as external CIs and therefore creating a competitive environment to guide the company's planning, strategy, as well as tactical decisions for its business activities. The CI cycle, which includes the detection of important intelligence subjects and issues, intelligence collecting, analysis, dissemination, and interpretation is used to provide intelligence. CI may provide value to a corporation if it is executed frequently and if no element of the CI cycle is neglected. Numerous analytical methods and tools are utilized by CI specialists within the pharmaceutical sector. Two clearly defined methods are: Initial analysis, utilizing calculation tools or simple filtering embedded within software or databases, and therefore the CI analysis. As per market CI research, SWOT and gap analysis, benchmarking, competition modeling, and scenario planning are the most widely used CI analysis approaches (Fletcher & Bensoussan, 2003). In such a short essay, it is not feasible to present a thorough review of CI in the biopharmaceutical business, but this summary offers some helpful information. However, it is very simple to provide the pharmaceutical industry a true competitive edge by applying certain fundamental procedures and paying enough attention to every part of the CI cycle - KITs & KIQs identification, analysis, Pubint, and Humint collection, and dissemination. (Aspinall, 2011)
6. Nikolaos and Evangelia (2012) emphasizes the context and concept of CI and its usage in the pharmaceutical industry. Extensive literature is cited for the appropriate and most correct definition of CI and a comprehensive review of the pharmaceutical industry, which are used in this research with a focus on the financial elements. The report also examines the prevalence of CI and assesses how unique the pharmaceutical sector is in comparison to other industries. CI is described as “a necessary, ethical corporate discipline for decision-making based on understanding the competitive environment”

by the SCIP (“Strategic and Competitive Intelligence Professionals”) group, as noted in Sharp (2009). A CI process may certainly provide the tremendous potential to develop and maintain value since the pharmaceutical sector is complicated, diverse, highly regulated, and technological. Additionally, a CI process may better comprehend the business environment and fulfill the promise of a fully informed decision-support tool to aid in the development of novel, inventive medications. (Nikolaos & Evangelia, 2012)

7. Adidam (2012) highlights the implications of CI in the market of India. The purpose of this paper is to investigate how CI practices affect business performance in the growing market of India. The following questions are addressed in the paper: Do CI operations affect the success of Indian enterprises on the market? If so, what macro & micro environmental factors influence and hinder CI for Indian companies? How are CI operations structured in Indian businesses? How is CI being used and spread throughout Indian businesses? (Adidam, 2012)
8. Tsokanas (2012) explains the complex nature of the pharmaceutical industry that’s existing and how CI has become a part of it. The authors take the instance of the Greek pharmaceutical market. Pharmaceutical businesses are forced to pay more attention to market behavior because of the complicated structure of the Greek pharmaceutical industry and the intensified competition that exists amongst pharmaceutical companies. CI is one of the best ways to effectively assist company choices by improving market understanding. The goal of the present study is to examine the amount of knowledge and the existence of CI in the Greek pharmaceutical business, to determine if a structured CI process would be practical and advantageous for the industry, and thus to identify the features it may involve (Tsokana, 2012).
9. Muraina (2012) talks about how the healthcare business requires the constant need for business and market intelligence, but there is still no established service that can help the health centers. The author explains through the case study presented for its university research center which explores business Intelligence methods for exploring the university health center database repository. The usage of market and business intelligence is very limited and that is being discussed in the paper (Muraina, 2012).
10. Jamil (2013) talks about the significance of market intelligence in the industry working with a case study analysis. MI is characterized as a cyclic, ongoing process created to continually generate knowledge from unprocessed and distributed data and information, with the intention of applying this knowledge to the strategic marketing management of a particular company sector. Finally, a study case is performed to verify the theoretical conclusions and enhance the definition of the MI concept by complementing the CI organizational process (Jamil, 2013).
11. Gaspreniene (2013) aimed at revealing the prospects for the use of competitive intelligence in business utilizing various methods and technologies for information collecting. The scientific literature identifies the successive phases of CI, viewing it as a process: determination of the need, appraisal of the need, need for a plan to fulfill the need, need for finance, and construction of a long-term plan. Nevertheless, corporations may not always want information about their rivals’ behavior, but they may seek to shield their information from competitors. Due to the circumstances of this

reversal in need, the following CI steps may be outlined as follows: identifying potential risks, assessing those threats, determining the degree of danger, choosing priorities, allocating resources, and eliminating threats. The following have been identified as the most often used CI information sources: company-owned information acquired from browsing the websites of rival companies and attending trade shows. This demonstrates that while the information is available, it may not necessarily be accurate or validated. The article's authors' approach helps us identify the key differences between employing CI in large and small- to medium-sized company sectors. The most notable distinctions between these two industries are CI finance and access to rivals' trade secrets (Gaspreniene, 2013).

12. (Maune, 2014) (2014) conducted a literature study to investigate the connection between CI and company competitiveness. This research is being conducted in light of the intense competition that businesses throughout the world are facing. An analysis of published electronic journal papers served as the approach for this work. The study identified the following two important problems: There are several viewpoints about the connection between CI and company competitiveness, and there is no best practice model that is widely acknowledged for adoption and adaptation. The findings from this study will be very helpful to academics and business managers in terms of developing and increasing their knowledge of CI and how it relates to company competitiveness (Maune, 2014).
13. (Maune A. (., 2014) (2014). This study might be a qualitative-exploratory survey of the literature. The author's initial goal was to investigate the position of the CI function inside organizations to ascertain the optimal placement and to ensure the validity of the literary study, only peer-reviewed journal publications were chosen. The results of this article allowed us to generalize the ideal location of the CI function and to create a few insightful hypotheses for further research. The results demonstrate that there is no one set of criteria on which to locate the CI function inside organizations. This work added scholarly value by helping business managers better comprehend and position the CI function (Maune, 2014).
14. Sauter (2015) talks about the introduction of a Decision network (DSS) holding major importance in the implementation of CI in the pharmaceutical industry. Technologies such as DSS are useful in resolving a wide range of complicated issues, particularly for those who depend on quantitative data and/or have a tactical focus. However, for making strategic judgments, decision-makers would greatly benefit from a technology that monitors and arranges data and information from qualitative and other hazy sources. A solution like this would be useful to grow, curate, and exploit an organization's intellectual assets to enable the users to make decisions in a more informed way. Although DSS technologies haven't been widely used in many contexts, they will soon be modified for application. This study examines the occurrence of a qualitative DSS in a healthcare environment that enables hospital managers to strategically use the qualitative data collected from their network of field representatives. This kind of technology, along with its associated advantages, is often applied to different business applications and scenarios (Sauter, 2015).

15. Pinto (2016) published a study focusing on the C&BI (“Clinical & Business Intelligence”) and its use and analysis of data collected in the healthcare context to directly guide decision-making. Laura Madsen defines business intelligence this way — “the integration of data from disparate source systems to optimize business usage and understanding through a user-friendly interface.” This study highlights the real value of intelligence in health, which is the fact that rapid access to, synthesis of, and display of clinical data have become crucial for how healthcare specialists decide how to treat patients and enhance care delivery. The evaluation of key performance indicators assists in focusing efforts on certain procedures and results required to advance healthcare organizations. This paper answers the question “does my organization really need to invest in CI”. Through their CBI plan, they have answered the question very swiftly and highlighted one major drawback that this plan is very costly and cannot be implemented by all organizations (Pinto, 2016).
16. Bulger (2016) talks about the evolution of intelligence from conventional CI to integrated intelligence. The complexity of CI is changing as a result of ongoing globalization, an abundance of publicly available data, and technological advancements. This presents opportunities for professionals with expertise in CI and related fields as well as for businesses that seek to use this expertise to gain a competitive edge. Corporations should engage themselves with the development of a robust decision-affecting function with teams of specialists that will cumulatively integrate different points of view and suggestions, using system thinking and a design strategy that will result in a synergistic and integrated CI or sometimes termed the integrated intelligence abilities. The only drawback of the research was that integrated intelligence is a cumbersome and time-consuming process and is difficult to establish in industries like healthcare and pharmaceuticals (Bulger, 2016).
17. Woodside (2018). This study examines the value of adopting complexity theory, modeling outcomes instead of directionality, and complex modeling leading to simple results in strategic management. The analysis of the anomalies extends onto detecting the incidences of four-corner strategy outcomes in CI: companies performing well in favorable conditions, companies performing badly in favorable conditions, companies performing well in unfavorable circumstances, and businesses performing badly in unfavorable circumstances. Models of four-corner strategy outcomes advance strategic management beyond this prevalent logic of directional modeling of single outcomes is a key matrix of CI, highly recommended in this study for a successful CI implementation in pharmaceutical firms (Woodside, 2018).
18. Freyn (2020) study the major principles of CI in industry, emphasizing the CI process as well as the C-suite’s responsibility in assisting a process and culture to eventually obtain a competitive advantage via a knowledge-based perspective. Having a cohesive system and culture inside a company is crucial given the growing amount of data. The healthcare system is a privatized sector with the increased competition that inhibits information exchange. Making decisions quickly and accurately has become crucial. Crises, such as the present COVID-19 outbreak, simply make the problem worse. Only the CI process and its benefits have been the subject of previous studies. There is little information available on how to incorporate CI into a company and its function

within the CI process. This research develops a model that aids in integration, knowledge transfer, and important company dynamics to support the function, but with the caveat that it is exclusively US-focused (Freyn, 2020).

19. Cavallo (2020) intends to investigate how CI connects to the strategy creation process of companies. The authors give extensive empirical data on the linkage and use of CI methods at every level of the strategy creation process. Furthermore, the analysis indicates that CI techniques, despite their strategic significance and prevalence, are nonetheless widely accepted for tactical usage (Cavallo, 2020).
20. Rosas (2021). This study's primary purpose was to identify the themes that were most relevant to Competitive Intelligence. The 589 articles that were analyzed show that this issue is becoming more popular, and Innovation is the main theme of the sample. The results of the bibliometric study show that CI is directly related to the innovation processes in businesses, which supports its growth. Additionally, it emphasizes the significance of business management, along with the encouragement of absorptive capacity and the alignment around CI, which will enable businesses to grow their competitive advantages and boost the success of new products. Little study has been identified on the topics of small and midsize enterprises and patents in connection to CI. This study intends to identify the CI themes that have been most thoroughly studied so that future research on these subjects and business managers' decision-making may be supported (Rosas, 2021).
21. Farley (2022) highlights how competitive intelligence has shaped the health industry and has acted as a precursor to the health system. This research paper highlights how other developing countries are still struggling to develop their competitive intelligence structure, the healthcare system in the US is largely privatized and highly competitive. This dynamic has stifled the usage of pharma CI mostly in the US, with a lag observed in other developing countries (Farley, 2022)

4.0 Proposed Solution

In the context of Western developed markets, CI was a significant role within the certain business, but none talk about how its implemented to be used for their daily business decisions. This literature survey leads to highlighting the gaps and voids left in the industries especially the pharmaceutical and healthcare industry, and how competitive intelligence could be a potential solution to filling those gaps. However, in the research conducted in the past 21 years, it has been analyzed and observed that there is still a requirement of bringing into light the right implementation of competitive intelligence in the global pharmaceutical and healthcare sector, to produce and provide better quality drugs and interventions and enhance the quality of life.

The literature review analysis brings some probable solutions through which this study can aid in the successful implementation and usage of CI in the global pharmaceutical and healthcare sector.

By employing a cross-sectional, survey-based methodology, global firms that display greater CI activity levels can achieve better financial performance even with the present

state of CI activities in global corporations, which is at a moderate level. This suggests a potential for implementing and using more advanced CI methods.

The findings of this study examining the last 21 years of CI research, would support local and international managers in having a more informed comprehension of CI operations in the world market for pharmaceuticals. Furthermore, these results provide managers with guidance on the undiscovered prospects and potential that CI may provide in a market environment that is very dynamic and changing quickly.

Highlighting the current state of CI practices, this literature review survey brings the past present, and potential applications and implementation of CI globally for pharma, and even though the pharmaceutical and healthcare industry still must come a long way in establishing competitive and market intelligence, this literature review analysis, and survey highlights the importance of CI and how it can be utilized, processed, and strategically used for the emerging pharmaceutical businesses.

References

- Adidam, T. (2012). Competitive intelligence and firm's performance in emerging markets: An exploratory study in India.
- Aspinall, Y. (2011). Competitive intelligence in the biopharmaceutical industry: The key elements.
- Bartes, F. (2010). Competitive intelligence: Tool obtaining specific basic for strategic decision making TOP management firm.
- Blenkhorn and Fleisher (n.d.). Competitive intelligence and global business.
- Bulger, N. J. (2016). The evolving role of intelligence: Migrating from traditional competitive intelligence to integrated intelligence.
- Calof J. L., Wright, S. (2008). Competitive intelligence: A practitioner, academic and interdisciplinary perspective.
- Cavallo, A. (2020). Competitive intelligence and strategy formulation: Connecting the dots.
- Colakoglu, T. (2011). The problematic of competitive intelligence: How to evaluate and develop competitive intelligence?
- David W Pickton, S. W. (n.d.). Competitive intelligence: The evolution of competitive intelligence.
- Farley, H. F. (2022). Competitive intelligence: A precursor to a learning health system.
- Frey, S. L. (2020). Competitive intelligence: A prescription for US health care?
- Gaspareniene, L. (2013). The opportunities of the use of competitive intelligence in business.
- Jamil, G. L. (2013). Approaching market intelligence concept through a case analysis: Continuous knowledge for marketing strategic management and its complementarity to competitive intelligence.
- Jaworski, B. J. (n.d.). Generating competitive intelligence in organizations.
- Maune, A. (2014a). Competitive intelligence and firm competitiveness: An overview.
- Maune, A. (2014b). Competitive intelligence and firm competitiveness: An overview.
- Muraina, I. D. (2012). Business intelligence in healthcare sector.
- Nikolaos, T., & Evangelia, F. (2012). Competitive intelligence: Concept, context and a case of its application.
- Pinto, B. (2016). Clinical and business intelligence: Why it's important to your pharmacy.
- Rosas, C. J. (2021). Innovation and competitive intelligence in business. A bibliometric analysis.
- Rouach, D., & Santi P. (2001). Competitive intelligence adds value: Five intelligence attitudes.

- Sauter, V. L. (2015). Visualization-based decision support systems: An example of regional relationship data.
- Tsokana, N. (2012). Competitive intelligence for the pharmaceutical industry: The Case of Greece.
- Woodside, A. G. (2018). Four-corner outcomes in strategic management: Successful and unsuccessful paddling down versus upstream.