Full Length Research Paper

Scenario of business practices in competitive intelligence within the telecommunication industry

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The present paper sought to apply the theoretical framework of Wright-Pickton on Competitive Intelligence (CI) to the business practice reality within the telecommunications industry in Brazilian firms. The aim of the study was to examine the current Brazilian scenario, which is to contribute to the improvement of that model. With this in mind, we devised a set of managerial advice in view of enhancing the Competitive Intelligence function, thus acknowledging such feature as being vital to the strategic decision-making process. Herein, the telecommunications industry has been thoroughly investigated in its value chain. To this end, the data collection was conducted through in-depth interviews with the executives in charge of the areas or functions that were comparable to the concept of Competitive Intelligence in their respective companies. Finally, the conclusions show that both aspects "data collection" and "use of CI outputs" are distant from what the Framework recognizes as ideal. Consequently, those points still need effective betterments to approximate the practice as much as possible of the company's strategy. Ultimately, this paper brings to light some pivotal discussions towards what CI is and its applications in business decision-making processes to add new insights to the theoretical framework of practice.

Key words: Competitive intelligence, Brazilian scenario, market analysis, Wright-Pickton, telecommunications.

INTRODUCTION

In recent years, the global competitive scenario has increasingly sent clear signs of fierceness and utmost intricacy. Some phenomena such as globalization, the rapidly changing consumer behavior, the shortening in the life cycles of several products, among others point to a gloomy and hard-to-foresee panorama. In this context, Argote and Ingram (2000), Heinrichs and Lim (2008), and Karim (2011) agree that knowledge is the main source of competitive advantage. Thus, having access to the information used to create and generate knowledge, as well as the organizational process of collection, retention, dissemination and application of such knowledge are essential elements for corporate survival in the midst of such a tempestuous and dynamic environment as the 21st Century. Therefore, the use of Competitive Intelligence (CI) in companies seeks to

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obtain such knowledge of the market. Moreover, as Kohli et al. (1993) positioned in their seminar paper on market orientation model, intelligence generation and dissemination plus the responsiveness provoked by the specific external pressure is fundamental to a company to improve its business performance.

Given the relevance of the topic to the field of Management, the present work aimed at diagnosing the practice of Competitive Intelligence in Brazilian companies within the telecoms sector. The tool of choice for diagnosis and analysis is the typology of Wright, Pickton and Callow (2002), being called here form now on WP Model. The construct establishes a framework of the CI practices expected in the organizational setting. The typology categorized the companies under four criteria: 1) attitude, 2) data collection, 3) use of information, and 4) the location of CI functions. For each of these, it is possible to establish a systematic arrangement and then identify the actual gap between the current situation and the model considered by the authors as "ideal." The choice of this model is justified due to its previous application in various industries and countries by different authors, Badr (2003), April and Bessa (2006), Liu and Wang (2008), and Hudson and Smith (2008) - thus enhancing its importance in academia.

It is worth mentioning that, more recently, the WP model has been applied in other industries, with different purposes and having some adaptations being suggested. For example, Wright et al. (2013) applied the model in Turkey analyzing the status and barriers for technology adoption related to competitive intelligence. Bisson (2014) has applied the model for the French public chambers of agriculture to examine their ability to provide information and knowledge for competitive and strategic purposes, as a support for farmers to become more entrepreneurial, and suggest adaptations when dealing with public organizations.

The project was carried out through in-depth interviews with managers responsible the functions of Competitive Intelligence in the firms, and also with the executives impacted with the outputs generated by that activity as in Wright et al. (2009). The survey sought to verify all the instances of the theoretical framework, and comprised eight companies within the telecommunications industry. The firms were placed in distinct stages throughout the value chain: infrastructure providers, device manufacturers, and carriers. In addition, this paper also seeks to contribute to improve WPmodel in line with the more recent studies such as Wright et al. (2013) and Bisson (2014).

In this sense, the questioning that the present work aims to answer is: Which is the stage of usage of concepts and tools for Competitive Intelligence in Brazilian companies within the telecommunications industry?

Accordingly, to answer such questioning, a literature review over CI and its ramifications in organizations shall be undertaken. Therein, the WP model will be introduced as the analysis method, and the main results of interviews with executives will be shown. Finally, as a final result of this study, the conclusions and managerial implications of CI in the cited firms will be presented.

**THEORETICAL/EMPIRICAL SUPPORT**

**Definition and evolution of the field**

There are several definitions to Competitive Intelligence; each author establishes his or her own approach, according to the due purpose. However, there is no universal, broadly accepted definition in the literature over the theme. For the purpose of this paper, the most appropriate definition refers to Wright et al. (2009). According to them, Competitive Intelligence comprises the process by which organizations gather information about competitors and the competitive environment, ideally using such information during their decision making process, and internal process planning. Thus, it is understood that CI has the aim of improving decision-making when bringing precise knowledge concerning the market and competition.

The early relevant articles about Competitive Intelligence date back from 1984. A survey conducted by Wright et al. (2002) identified that until the 2000s, about 700 articles have been published in far-reaching academic journals. Over the first fifteen years, the studies chiefly focused on the reality of either the United States or Canada; with a rather scanty scope concerning other regions of the globe.

The evolution of the field shows a conceptual change in the research approach over the competitive scenario. The first publications define the term "competitor intelligence," as defined by Lendrevie and Lindon (1990), as the activities companies employ to determine and understand their competitors, their strengths and weaknesses, and anticipate their movements.

The term "competitive intelligence" emerges as an extension of that scope since it includes the response of the competitor and the company itself towards the changes in consumer habits into the strategic decision making process (Lendrevie and Lindon, 1990). In this way, the competitive environment is also considered in the analysis.

Thus, competitive intelligence stands as the evolution of competition monitoring for having also incorporated such activity into the company's strategic management. The most recent articles now tend to focus on "how" to practice CI, instead of discussing "why" to do it, since that phase seems duly overcome.

Another author depicting the conceptual evolution of Competitive Intelligence is Prescott (1995). He performs a gradation into three eras: before 1980, the period between 1980 and 1987, and from 1987 until the present date of his study. In each one, the CI scope evolves
Table 1. Evolution of competitive intelligence.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection</td>
<td>Analysis of</td>
<td>Competitive</td>
<td>CI as a key</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competitors</td>
<td>Intelligence</td>
<td>competence</td>
<td></td>
</tr>
<tr>
<td>Formality level</td>
<td>Informal</td>
<td>Partially formal</td>
<td>Formal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Formal and Informal</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>Tactical</td>
<td>Tactical</td>
<td>Tactical / Strategical</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strategical</td>
<td></td>
</tr>
<tr>
<td>Analysis</td>
<td>Little or none</td>
<td>Predominantly</td>
<td>Qualitative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quantitative</td>
<td>and quantitative</td>
<td></td>
</tr>
<tr>
<td>Attention of senior</td>
<td>Low</td>
<td>Limited</td>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>executives</td>
<td></td>
<td></td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Influence on the</td>
<td>Little</td>
<td>Weak</td>
<td>Strong</td>
<td></td>
</tr>
<tr>
<td>decision-making process</td>
<td></td>
<td></td>
<td>Direct input</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Library/ Marketing</td>
<td>Planning / Marketing</td>
<td>Planning / Marketing / CI Unit</td>
<td>Planning/ Marketing / CI Unit</td>
</tr>
<tr>
<td>Source: Adapted from</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

dwithstanding to fit the corporate requirements regarding its function. Table 1 summarizes this trend.

The table shows the evolution of the field over the past decades, starting from a reduced scope, with little exposure and power within the company, to becoming a highly influential activity on corporate decisions, with robust techniques of analysis and greater attention of senior executives. It is noteworthy that the "future" appointed by the author referred to the year of publication of his article (1995).

Key Concepts in Competitive Intelligence

One of the main concepts of CI is the Intelligence Cycle, understood as the process by which raw information is transformed into knowledge (Kahaner, 1996). Figure 1 comprises the four phases presented by the author for this cycle:

1. Planning and Direction
2. Collection
3. Analysis
4. Dissemination

The first phase comprises Planning and Direction, where there is scope definition of CI activities, objectives and the expected outcomes through its practice. The second phase is the Data Collection, which involves gathering the desired information from the previous selection of sources, whether primary or secondary. The third phase involves the Analysis of data, which is considered the most intricate stage, where CI practitioners need to evaluate the data, seeking for patterns and delivering, as the outcome, different scenarios / answers based on what they learned. Finally, the fourth phase corresponds to Dissemination, which includes the knowledge spread throughout the areas of the company that initially had expressed the need for the answers therein obtained from CI. This cycle is restarted, because the dissemination of knowledge generates new questions and questionings that once again shall be addressed.

Under a more methodical viewpoint, another conception of CI resides in the Competitive Intelligence Process of Gray (2010). Figure 2 illustrates this step-by-step guide elaborated by the author.

Properly, the process indicates the function on the practice of CI which is lead raw data through a "machine" of the organization, analysis and selection of such data, until the created intellect can be valuable to the decision-making process. In fact, the results obtained from the
Table 2. Description of different behaviors regarding attitude and understanding of the companies on the practice of CI.

<table>
<thead>
<tr>
<th>Attitude type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immune attitude</td>
<td>Too busy thinking about today to worry about tomorrow. Thinks that CI is a waste of time. Minimal or no support from either top management or other departments.</td>
</tr>
<tr>
<td>Task driven attitude</td>
<td>Finding answers to specific questions and extending what the firm knows about its competitors, usually on an ad-hoc basis. Departments more excited about CI than top management who don’t see the benefits.</td>
</tr>
<tr>
<td>Operational attitude</td>
<td>A process, revolving around the company as its center, trying to understand, analyze and interpret markets. Management tries to develop positive attitudes towards CI for short-term and personal bonus gain.</td>
</tr>
<tr>
<td>Strategic attitude</td>
<td>Integrated procedure, competitors are identified, monitored, reaction strategies are planned and simulated. Gets top management support, co-operation from others, seen as essential for future success.</td>
</tr>
</tbody>
</table>

Source: Wright et al. (2009).

decision should be applied valuable inputs for IC process in the future, which will interpret such results throughout its chain.

The Wright-Pickton Best Practice Model

As to the practice of CI in firms, Wright et al. (2002) conducted a study motivated by the "imminent risk" of consumer needs only to be considered the main input for strategic planning in corporate marketing. In other words, the authors felt that there was a scholarly knowledge opportunity for the process of market diagnosis to incorporate, in addition to the client-oriented perspective, the movements of competition within the competitive environment.

Therefore, to address this issue, the authors conducted a survey in the United Kingdom with both top management executives, and particular professional practice of CI. Respondents belonged to a vast myriad of business segments, to create a framework for the classification of IC activities of companies, keeping in mind their ideal goal: to provide support to the strategic decision-making process. The framework, WP model, was designed upon four objectives:

(a) Determining both attitude and understanding towards the practice of CI in companies;
(b) Identifying information gathering methods;
(c) Assessing the use of CI practice outputs for strategy formulation;
(d) Identifying where the responsibility for the functions of CI within the organizational hierarchical structure is allocated.

The categories designed for each of those factors are outlined in Tables 2 to 5.

The categories show a threshold variation within the firms' reality, ranging between a poorly integrated structure of IC processes and the level of nearly perfect integration with the practice towards the strategic decision-making flow. Therein, to classify the answers of respondents in those categories, the following factors were used: intelligence lifespan, terminology for functions of CI, and attitudes of the leaders regarding the activity of CI.

Another dimension of the model is the information gathering process, ensuing to the following rationale:

Two categories differentiate and measure the robustness of the processes of information gathering towards intelligence activities. In this sense, to classify the respondents' replies, two aspects were taken into account: types of intelligence collected and sources used.

A third dimension in the model involves the use of knowledge generated by the practice of CI in organizations:
Table 3. Description of the different behaviors in the firms towards the collection of information for the CI process.

<table>
<thead>
<tr>
<th>Gathering Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy gathering</td>
<td>Firms which use general publications and/or specific industry periodicals and think these constitute exhaustive information. Unlikely to commit resources to obtain difficult or costly information</td>
</tr>
<tr>
<td>Hunter gathering</td>
<td>Firms that realize that CI needs extra, sustained effort than Easy Gathering. Resources are available to allow staff to act within reasonable cost parameters. Intellectual effort is supported.</td>
</tr>
</tbody>
</table>

Source: Wright et al. (2009).

Table 4. Description of the different behaviors regarding the USE of the knowledge produced by CI in the companies.

<table>
<thead>
<tr>
<th>User type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joneses User</td>
<td>Firms trying to obtain answers to disparate questions with no organizational learning taking place. Has commissioned a CI report from a consultant because that is what everybody else has done.</td>
</tr>
<tr>
<td>Knee-jerk User</td>
<td>Firms which obtain some CI data, fail to assess its quality or impact, yet act immediately. Can often lead to wasted and inappropriate effort, sometimes with damaging results.</td>
</tr>
<tr>
<td>Tactical User</td>
<td>CI mostly used to inform tactical measures such as price changes, promotional effort, competitor activities in the market or segment, yet is acutely aware of its potential value to the business.</td>
</tr>
<tr>
<td>Strategic User</td>
<td>CI is used to identify opportunities/threats in the industry and address “what if” questions. All levels of staff know the firm’s CSFs, open management culture which displays trust and encourages involvement.</td>
</tr>
</tbody>
</table>

Source: Wright et al. (2009)

Table 5. Description of the different behaviors regarding location of IC activities in the companies.

<table>
<thead>
<tr>
<th>Location type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad-Hoc Location</td>
<td>No dedicated CI unit. Intelligence activities, where undertaken, are on an ad-hoc basis, subsumed into other departments, with intermittent or nonexistent sharing policies.</td>
</tr>
<tr>
<td>Designated Location</td>
<td>Firms with a specific intelligence unit, full time staff, dedicated roles, addressing agreed strategic issues. Staff have easy access to decision makers, status is not a barrier to effective communication.</td>
</tr>
</tbody>
</table>

Source: Wright et al. (2009).

Table 4 displays the categories that differentiate the motivating factors for the use of intelligence, and how close to the strategic decision making it is. Then, to classify the answers given by respondents within this framework, the following criteria were considered: a) purpose of intelligence activities, b) methods used for analysis and dissemination, and c) mechanisms to check information accuracy.

Finally, the model includes the type of location of CI practice within companies into their hierarchical and functional structures: The two categories of allocation take into account a more objective look at the time that the company establishes their process of intelligence acquisition, i.e., what the company does towards the needs of knowledge resulting from CI. Consequently, there are two possible pathways: the company may either perform cluttered and fragmented intelligence “functions” or concentrate efforts into a specific department, with a full-time staff, properly designated this end, having as outcome a comprehensive and broader view of the competitive scenario.

Consequently, within this framework, the ideal model appointed by the authors refers to the company classified in the last category of each criterion. In other words, for intelligence activities to fulfill their goal, they should have a strategic approach with a thorough collection of information that would be used for strategic decision making; this process should be allocated in the...
Table 6. Set of questions versus WP model

<table>
<thead>
<tr>
<th>Attitude/Gathering</th>
<th>Use</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice longevity</td>
<td>Type of data collected</td>
<td>Reasons for engaging in CI activities</td>
</tr>
<tr>
<td>CI practice Terminology</td>
<td>Sources of the information used</td>
<td>Major areas serviced</td>
</tr>
<tr>
<td>Senior Management Support</td>
<td>Analysis tools employed</td>
<td>Knowledge Dissemination methods</td>
</tr>
</tbody>
</table>

Source: Elaborated by the author

Table 7. List of respondents.

<table>
<thead>
<tr>
<th>Business</th>
<th>Position held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Telephone Carrier</td>
<td>Director</td>
</tr>
<tr>
<td>Landline and mobile telephone, and TV service provider</td>
<td>Director</td>
</tr>
<tr>
<td>Landline and mobile telephone, and TV carrier service provider</td>
<td>Senior Manager</td>
</tr>
<tr>
<td>Electronics manufacturer, mobile telephone devices</td>
<td>Manager</td>
</tr>
<tr>
<td>Electronics manufacturer, mobile telephone devices</td>
<td>Manager</td>
</tr>
<tr>
<td>Landline and mobile telephone, and TV carrier service provider</td>
<td>Director</td>
</tr>
<tr>
<td>Mobile Telephone Carrier</td>
<td>Senior Manager</td>
</tr>
<tr>
<td>Telecommunications Infrastructure manufactures</td>
<td>Director</td>
</tr>
</tbody>
</table>

Source: Elaborated by the author.

METHODOLOGY

The project used a qualitative approach, since the application of the theoretical model of Wright et al. (2002) involves a thorough investigation of perception and attitude of managers of companies in IC practice. Such analysis requires an exploratory perspective, because the interaction between researcher and respondent is essential for adapting the obtained responses to the framework.

The data collection was conducted through in-depth, face-to-face interviews. The set of questions followed the same line of questioning used by Wright et al. (2009), with the addition of a final question about the central issues that, according to the perception of respondents, currently challenge CI teams practically.

1. What is the longevity of CI practices use in your company?
2. What terminology is used for the CI gathering process?
3. What are the processes and/or procedures for acquiring intelligence?
4. What are the main reasons for CI activities in your company?
5. What are the main areas serviced by CI in your company?
6. What is the commitment level of senior executives towards CI practice?
7. What types of intelligence is gathered?
8. What sources of intelligence are used?
9. What methods of analysis are used?
10. What dissemination methods are employed?
11. What accuracy mechanisms are employed?
12. What are the main challenges faced by your CI area today?

Each question addresses one of the blocks of the WP model. Table 6 summarizes this correspondence.

In this way, each response obtained fits the company of the respondent into one of the categories presented in the previous chapter, within the four blocks of the model evaluation. The classification took into account the degree of maturity of the practice displayed by the company, regarding the use of CI concepts and tools – in accordance with the research questioning. Therefore, the higher the degree diagnosed in the responses, according to the structured interview, the nearer to the ideal scenario, predicted by the model-Wright Pickton, the company would fit in.

Eight executives, CI practitioners within organizations were interviewed, which held different positions and level of seniority. Table 7 shows all respondents and their hierarchical positions. It is important to mention that the 8 respondents represented 8 companies and they together represented an important share of the Brazilian telecommunications market, indicating that although the sample was small it represented quite all the industry being analysed.

The coding process to interpret and categorize all the content
Table 8. Coding of answers.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Question</th>
<th>Example of answer</th>
<th>Author’s analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude – Strategic Attitude</td>
<td>What is the commitment level of senior executives towards CI practice?</td>
<td>“(Name of the company’s president) is a person that always has some time in his agenda for you. That’s the success factor of a CI department: to have a key sponsor that wants this kind of work and values our inputs and takes you forward. He is our spokesman when we do an analysis with important recommendations that need to be addressed by our internal clients.”</td>
<td>In this case, we clearly see that the CI department has a big support from the company’s president in its projects, which means that this specific organization has a strategic attitude towards the practice of CI.</td>
</tr>
<tr>
<td>Gathering – Easy Gathering</td>
<td>What sources of intelligence are used?</td>
<td>“We have a lot of sources, such as news clippings, media, government agencies numbers etc. However, this huge information outline could be useless, once that we don’t have the capacity to process it or analyze it. We are looking for some technology supplier that could help us to extract, consolidate and organize all this information in a user-friendly platform, but it is hard to find an affordable one.”</td>
<td>In this case, we understand that the company tries to compose an interesting structure of information sources, but has a problem to use it properly. So, despite the effort, the sources are misused which means that the organization has an easy gathering method.</td>
</tr>
<tr>
<td>User Type – Knee Jerk User</td>
<td>What dissemination methods are employed?</td>
<td>“We used to try to present in a meeting all our studies, but we failed at most of the times due to agenda problems. The department that asked us some analysis almost never had time to schedule a conference. So, we quit this initiative and started to send our reports by e-mail and if there is some doubt they call us.”</td>
<td>According to Marin and Poulter (2003) and Kahaner (1996), the electronic methods of dissemination do not address properly the objectives of the CI practice. In this case, we see that the company pursues a method that doesn’t allow the dialog and feedback among areas, which indicates an example of knee jerk use.</td>
</tr>
<tr>
<td>Location – Ad-hoc Location</td>
<td>What are the processes and/or procedures for acquiring intelligence?</td>
<td>“Our department is specific to the CI practice, but we are still building our reputation within the company. So, there are other departments that do some functions, in an unstructured way, that we should do, generating rework and waste of effort.”</td>
<td>In this case, despite the existence of a CI department, there are a lot of other CI activities being done by other areas. So the CI effort is not concentrated, which sets an Ad-Hoc Location.</td>
</tr>
</tbody>
</table>

Source: Elaborated by the author.

extracted from these interviews was followed as indicated by Nogueira (2001). The sentences were transcribed and classified within the conceptual framework. Table 8 gives us some examples on how this interpretation was made to fit the answers in the WP model. Some words are in bold within the respondents’ statements to demonstrate the process of classification:

RESULTS

Based on the interviews, there was an adjustment of the responses to classification categories that are specified in the model-Wright Pickton. Figure 3 points out the panorama of the telecommunication industry in the practice of Competitive Intelligence:

As for the first block, the industry was diagnosed as Operational Attitude, a prior stage to the ideal WP model. The strengths included the aspects of notion of the history / evolution and terminologies used to describe the practice of Intelligence within companies. On the other hand, the aspect of senior management support to IC activities was identified as the drawback.

Although few respondents were able to cite the exact date of the start of activities in the field of CI, it was noted that the history and the evolution of the practice of CI within the companies were well known by the managers. Still, in some cases, the short time working in the company or occupying the position were not obstacles for leaders to know which way to point out that the function of IC followed in past years. This evident temporal contextualization is crucial to demonstrate that managers understand the positioning of CI within the company.

As for the terminology used, it can be noticed that companies have an adequate overall understanding of the activities of the IC. Nevertheless, it was observed that firms still make slight dissonances naming such as "Competitive Intelligence" or "Market Intelligence."
was only one exception, in which the area responsible for the CI functions received the denomination "Market and Consumer Research." That is an interesting case because, in addition to strengthening the inclusion of the market environment the scope of competitive intelligence, it also shows a cultural trait of that company, which is strongly customer-oriented.

However, at the time of diagnosis on the support of senior management to IC activities, it was concluded that the outlook is still far from ideal. Although there is some support in all cases, there are issues about its intensity, e.g., whether IC leaders perceive it as "high" or "medium". The "Medium" support provided by senior management was reported as a "space" that the area still needs to build, and then secure a high relevance status towards pivotal /strategic projects of the company.

The level of support given to the CI activities is intrinsically linked to the mindset shared by the key managers of the company. In this sense, what is thought for the whole company ends up influencing what is expected as output from the practice of CI. Kahayev (1996) also indicates that some managers are still stuck in the age of information, failing to see their difference in relation to intelligence and thus limiting the understanding of the real benefits of the CI practice.

The classification on the second block, thus, means that the process identified in the organizations exists, trying to understand, analyze and interpret markets. It supported the view that managers have tried to develop positive attitudes towards CI for short-term and personal bonus gain and not yet a strategic role existent in the company as the highest stage would indicate, supporting the proposed form of classification suggested by the WP model.

About the second block of information gathering, the industry was assessed as belonging to the classification "Easy Gathering". In this case, some positive and negative points were identified in relation to the best-case scenario predicted by the model.

Among the types of positive information, the types listed by IC areas are highlighted, varied and complementary. Closer data, such as information about competitive products and market indicators are complemented with consumer perceptions and international benchmarks that may convey a more comprehensive view of the market.

Nevertheless, the questionings on the degree of depth of content collection from each source show differences that vary according to the availability of information and the delivery of the sought knowledge. The amount of data is directly related to the low depth of information gathering for analysis. Essentially, that happens due to the dynamic stance of the industry; the majority of respondents believe that market timing is hectic, and the CI areas tend to deal with situations of low gathering depth.

On the other hand, regarding the sources used, it was found that companies seek different sources of information to work in their analyzes. However, shortcomings over that process are evident: the given "Waste" of internal information, recognized by many respondents from other areas of the company and the great difficulty in processing and relating the sources for intelligence generation. Therefore, this indicates that the data...
analysis funnel can be flawed and lead to losses in collection quality.

Regarding the third block, we understand that the industry is on the Knee-Jerk stage. Some issues identified in the survey count against the proximity of an ideal Strategic Use situation. In this context, the CI team tends to display a reactive stance towards strategic projects undergone in the company, predominantly acting as a contact point that meets a roll of internal demands, most of them of a tactical nature, under a short-term horizon. Ultimately, intelligence practice ends up assuming an "order taker" attitude before the client-areas, not exerting effects on the decision-making process in a more proactive and decisive manner.

Still in this context, in some instances, there is a tendency for mechanization and the "routinization" of the activities in the area. That is because, in some companies, it accounts for generating of the official market figures for the entire company, which seeks to use information from a single source for standardization and error mitigation. Such information reporting happens oftentimes, ultimately conveying periodic reports that are disseminated to other areas.

Another aspect consists of the allocation of CI outputs that, eventually, services with greater emphasis three main areas - Marketing / commercial, planning and communication. Therefore, assuming a more operational status, the data gathering has assumed a more a easy gathering process than a hunting process. It is clear that there is a tendency that being more operational oriented means using easier data collection procedures. Thus, it seems clear that there is most probably a relationship among the classification blocks in WP model.

Regarding the methods of analysis, respondents exhibited modest precision and assertiveness to identify the most used tools in the studies. The most frequent response argues that such tools "depend on the type of intelligence" to be used at a given moment. Thus, we note that the existing analysis techniques are occasionally employed, according to each need. Accordingly, the portfolio of tools was limited, and a comparison with other studies showed significant gaps. In some studies, it is observed that the area of CI predominantly performs a consolidator / organize function, even more than information analysis functions. Another highlighted point was the lack of references to the control mechanisms concerning information accuracy. The concern with this issue appeared recurrently. However, the check is usually done mechanically / manually and is performed by analysts according to their own criteria.

However, we identified some attempts to adopt a more proactive stance, not only to inform decision makers, but also to influence them with the opinions and recommendations issued by analysts and managers of CI. In more than one firm, managers pointed out that their area was seen as "an internal consulting" which can propose suggestions and opportunities for improvement from market analyzes they performed. In this sense, the area was considered an entity apart the day to day of the business.

Subsequently, there is an additional bright spot regarding the mechanisms of information dissemination. The most observed model consists of the areas of CI, which tend to show their work interpersonally - Through formal presentations and meetings - for decision makers should make use of such information. However, there are also cases in which the areas favor the electronic model of dissemination, either by sending materials via email or via intranet portals to endow content sharing.

Nevertheless, despite the understanding of many respondents about the importance of the interpersonal model of dissemination, factor "timing" is the main criterion of choice on what will be the means employed to communicate the knowledge generated. If the message needs to be delivered within a short time and there is no schedule for structured communication between departments, the electronic medium is readily triggered. The difficulty to "make room" in the departments' schedules which had requested CI knowledge is another factor apparently related to the partial lack of visibility of the practice within organizations.

It is clear that if CI in most cases has not achieved a strategic level, the purposes of the applied analysis is to support tactical decisions, where more simple analysis techniques should be required as WP model indicated.

Finally, the fourth assessment block of the model indicates that the telecom industry is the most appropriate setting, which is Designated Location. Accordingly, the firms in the field have realized that defining an area with unique roles and responsibilities for CI is crucial. Although the 8-year history of those areas, they earnestly strive towards gaining space within organizations, so they can work consistently to provide the company with the benefits of concentrating market knowledge into a single framework.

Apart from "fitting" structured interviews to the WP model, the last question on the survey sought to understand what are, according to the opinion of the respondents, the main challenges that the practice of CI shall face in the coming years. Thereupon, the main challenge is to improve the collection of information, including current sources to also encompass internal areas within the organization. Another challenge lies upon the effort to raise the visibility of the CI function within the companies. That shall maximize the results and impact of their outputs, consequently avoiding activities in duplicity. Finally, another significant challenge refers to the development of skills of the people working in the areas of CI. This is in line with the idea that CI activities within the industry being studied in Brazil should develop and prove itself of strategic value to the top management and that should be a matter of time and
DISCUSSION

Initially, the paper sought to trace the managerial implications of efforts to improve the practice of CI in Brazil, which necessarily means to list the main points to address the shortcomings observed in the diagnosis of the industry based on the WP framework (Figure 4).

The first step is to approximate the CI departments to strategic projects of the company, and consequently, their key decision makers. This part belongs to the practice leader, regardless of their position. Making an approximation to Competitive Cycle (Kahaner, 1996), this position would ensure that the first stage of planning and direction were properly fulfilled. The leader should be the primary "seller" of CI practices in the company, defending its importance, and securing its place within the strategic planning.

Thus, by taking advantage of the commercial analogy of looking at the CI leader as a "seller," another key point is that the product of such area is valuable for those who buy it, i.e., the decision makers. Something that has been previously discussed throughout the present work is that the area of CI has to demonstrate credibility on a recurring basis, delivering relevant knowledge to the entire company. Thus, leaders also have to concern about what their teams produce. Transform raw information into knowledge should be a mission Kahaner (1996) and Gray (2010) pointed out.

The third point is the challenge of deepening the process of gathering information. Managers engaged in CI practices need be attentive to the richness of existing information in the organization itself. For example, the commercial area, which daily supply products to customers, receives constant feedback from consumers about their perception in relation to offers made by competitors. Vendors intimately know the positioning of competitors from the perspective of customers. These are rare information that does not appear very clearly in external data sources, such as news, market reports, and the like.

The fourth point, also to enhance data collection, consists of taking maximum advantage of data for knowledge generation. That means that the areas of CI must improve their funnel in the knowledge production process - i.e., make their analytical capacity process the large volume of data with objectivity and assertiveness. To this end, the CI leaders may follow two possible directions, they can: (a) use technological tools / software which facilitate processing multiple data sources, and the reading of these data by industry analysts through friendly and didactic interfaces; or (b) select staff with analytical and synthesis skills as core competencies. It should be said however that attracting and retaining skilled labor is a challenge commonly faced in developing markets, and therefore this point should be mentioned when thinking how to develop the company (and its people) towards a better CI performance.

Regarding the use of the outputs, it is worth mentioning that there is no great warning for a radical change at the focus of CI, from tactical issues to strategic issues. “Competitive Intelligence comes in many flavors” (Fuld, 2012), i.e., it can have different meanings depending on who will use it as a basis for decision making.

Nevertheless, the area of CI needs to go even further than that. The knowledge generated is crucial to the strategic decision makers with a long time horizon. The alignment of the CI practitioner manager along to the organizational leaders is essential for this to occur. The CI area must combine a reactive posture, of meeting tactical decisions as need areas, with another, proactive, seeking to develop projects and studies that are aligned...
with the strategic agenda of the company.

In this sense, that combination is critical because the tactical support is essential for the work of CI to be quickly evaluated and recognized by the organization. Thus, the area gets conditions to work on strategic projects since its performance has been evaluated by other organizational actors. The leader's role is to ensure the implementation of such a combination, allocating the effort of their team to do so.

The sixth and ultimate managerial implication comprises tighter discipline of CI managers to pursue the interpersonal communication model and a more robust checking system of processed data. Herein, it is understood that the high turbulence of the telecommunications industry is the primarily responsible for preventing executives from adopting the most suitable approaches to these two criteria since there is great pressure for delivery of the work requested in the areas of CI in a very short time. This so-called "rush" of client-areas eventually make some executives adopt some action which is not recommended according to the WP best practice model. This probably is a result stressed by the choice of industry and market of this study.

Another conclusion of this effort, which may be understood also as a research result, is the window of opportunities to improve the WP model in future research. As an example, the the article of Wright, Bisson and Duffy (2013), that applied the model in small and medium enterprises in Turkey, also have included suggestions of other dimensions related to technological support and information technology support. This paper, once WP model applied, had other additional opportunities for improvement.

The first contribution refers to the insertion of the human factor as an additional block to be included in the Scope of Review. The framework evaluates processes that explain how companies fall Competitive Intelligence in their decision making. However, some conclusions from this study reveal the great importance of the human factor plays in the success of the area as a strategic influence in the company - both through the leader, as the analysts who prepare studies. Almeida and Fonseca (2014) have studied factors related to the decline of CI practices by an organization. Stands out from their results coming from multiple case studies is the key role that the sponsorship coming from key leaders in the organization in implementing and developing the CI practices into a more fundamental and strategic role in the organization.

Another important contribution is the approach for assessing Attitude. According to the script used, it is measured through the understanding of three factors: (a) longevity of CI activities in the firms, (b) terminology employed in the practice, and (c) support from senior management. However, through the interviews, another extremely relevant factor was perceived. This element can also be evaluated in view of the diagnosis of the attitude of the organization over the CI, which is the proper fulfillment of the first stage of the Competitive Cycle - Planning and Direction. Firms without discipline to carry it out with due attention can generate works that will fail to add value to decisions in the future.

Lastly, another important contribution to the model involves the difficulty of classifying cases in some categories. This happens mainly in the case of the Gathering block, in which the model predicts only two types - "Easy Gathering" and "Hunter Gathering". After the interviews, some classifications were more accurate if they were placed in between two types, closer to one of them.

Therefore, an improvement is to avoid the "obligation" of finding a specific category for each block. Hence a gradation could be created to signal the proximity with some class already provided for in the model. Thus, the readings would be more accurate, there would be no need to forcibly assign a unique label for the segment under study.

Conclusion

In conclusion, the paper first could classify the telecommunication industry in Brazil according to the WP model being operational in terms of attitude, easy gathering processes in terms of information collection, of tactical use and, finally, as having a designated location in the organization.

As discussed the model is shown to be appropriate for a classification in a developing market in a telecommunication industry. Clearly, a lack of strategic vision for the area indicated that more tactical and operational use is being the case. Six improving opportunities were commented, not ignoring however, management and industry specific context that somehow contributes to the actual status of CI to be as it is in the companies studied.

As a contribution the authors also suggest that the human factor could be another dimension, such as the inclusion of Planning and Direction in the Attitude Dimansion and finally the possibility that the model includes some grading with a scale type measure.

With regard to the limitations of the present study, there are limitations. First the study had only 8 members being interviewed due to the fact that few people worked in this specific position in the telecommunication industry in Brazil. It is known that these companies represented well the industry as indicated in the method's part, however it should be considered that a larger sample would strengthen the results.

Secondly, the method of coding objectively the results was an alternative to reduce the researcher subjectiveness from the results, but the decision to classify ambiguous or hard to define sentences were ultimately made by the researchers as well the interpretation,
indicating that a portion of subjectiveness is always present and should be taken into account.

This study was done specifically applying the WP model in the Brazilian telecommunication industry. Similar results may be found in related industries, such as technology consumer goods like computers, smartphones and so on, being an opportunity to compare results across industries in future studies. Indeed, the expansion of the diagnostic for other sectors, competitive in different contexts, can be quite interesting in order to draw conclusions about how external factors influence the structures and processes within the areas of CI. Likewise, the use of the framework with the contributions proposed in this paper is an auspicious opportunity to measure their practical gains.

REFERENCES


