

Title: An Overview About CI Strategic Alignment in Brazilian Companies

Olavo Viana Cabral Netto (olavo.netto@usp.br)
University of São Paulo

Fernando José Barbim Laurindo (fjblau@usp.br)
University of São Paulo

Abstract

Competitive Intelligence (CI) has emerged as a contribution to strategic management of companies. However, given the information overload, deploying CI programs requires strategic direction. This article discusses the alignment between strategy and CI and proposes a model to evaluate CI strategic alignment based on structural analysis in the industry.

Keywords: competitive intelligence, competitive strategy, strategic alignment

Introduction

In the recent years, competitive intelligence (CI) have emerged as a major contribution to the strategic management, especially regarding the organizational learning. However, given the information overload issue, CI program requires a strategic direction – that's why this article focuses on CI strategic alignment. Based on the industry analysis, we propose a model to evaluate the efforts of CI programs and how does it aligned with strategic decition makers' assuptions about the five competitive forces. Therefore, this paper presents the results of a 28-question survey answered by 30 companies in Brazil.

Competitive intelligence

There is no doubt that companies around the world are looking for increasing their competitiveness and, to do so, most of them are trying to explore the power of knowledge. Data is a key factor to improve strategic decision assertiveness but due to overload information organizational decision-making processes need to improve its information management skills. In this context, CI figures out as a tool whose function is develop and manage information products – mainly those are included in strategic management. In other words, CI programs must provide best practices for the identification and use of knowledge assets, which enable the creation of sustainable competitive advantage.

Overall, CI aims to add value to information, emphasizing its strategic character and accelerating organizational growth (SCIP 2007). Companies need to develop a set of capabilities in order to ensure capture, interpretation and access to information with high aggregated value to assist their strategic decision-making (Sewlal 2004; Cabral Netto 2007). Hall and Bensousson (2007) argue that executives need to understand that good CI is critical to decisions and thus

competitive performance. “Senior managers need to understand that good CI is critical to an organisation’s competitive decision and competitive performance” (Fatti and Du Toit 2013:6). Thus, the CI must be used as “a business tool that can make a significant contribution to the strategic management process in modern business organizations, driving business performance and change by increasing knowledge, internal relationships and the quality of strategic plans” (Momeni and Mehrafzoon 2013:32).

However, any literature review about CI indicates that there are some different perceptions because the dual meaning of word intelligence – it indicates possession and creation of knowledge. If creation is a process in which company work on a set of raw data and information to add value, on the other hand possession represents a cognitive function in which is possible to access the knowledge with different purposes (Jourdan et al. 2008). So, CI can be understood as an organizational process that collects signals from the market in competitive environment for you to deliver the knowledge to particular group of decision (Lesca and Caron-Fasan 2008) or an organizational function in which decision makers are able to access organizational knowledge (Du Toit 2003). Cabral Netto (2011) presents a scientometric model to define the scope of CI activities, showed in the Figure 1 – it organizes the relation between CI and other five knowledge areas.

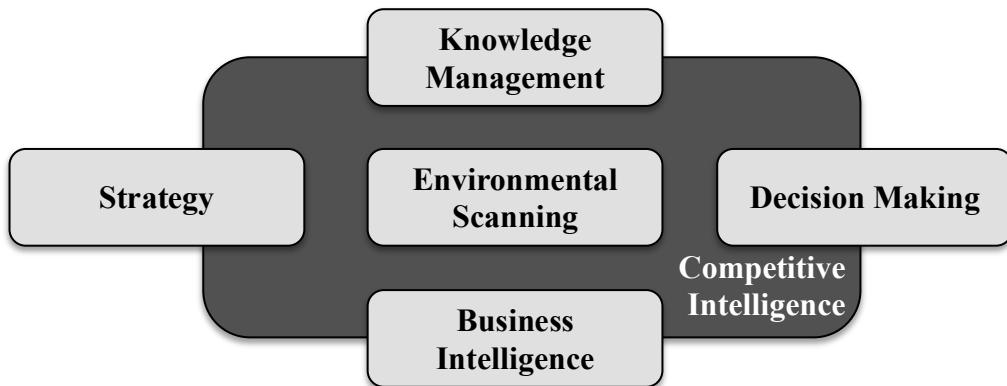


Figure 1. CI holistic view (Cabral Netto 2011)

Erickson and Rothberg (2009) argue that knowledge can be used as a competitive advantage if company implement good processes to identificate and manage it knowledge asset. It supports Powell and Bradford (2000) hipotesy that CI is an important strategic tool in a sense that its goal is to promote applied intelligence – contextualized, analysed and synthesized information. Kahener (1996) points out several advantages of CI adoption e.g. (1) to anticipate changes in the environmental, (2) to anticipate competitors' actions, (3) to promote organizational learning about new technologies, products, processes and laws, (4) to support strategic decisions. That is the reason why Saayman et al. (2008) argue that CI should take part in strategic formulation process and their actions must be aligned with organizational strategy.

Mortara et al. (2009) detail the importance of CI to decision-making process and thus strategic management, presented in the Figure 2. It suggests that strategy should provide the intelligence needs – CI inputs – and CI must to support decision maker's needs in order to guide the action. Therefore, the interaction between the strategy and CI is an interative customer-supplier relation.

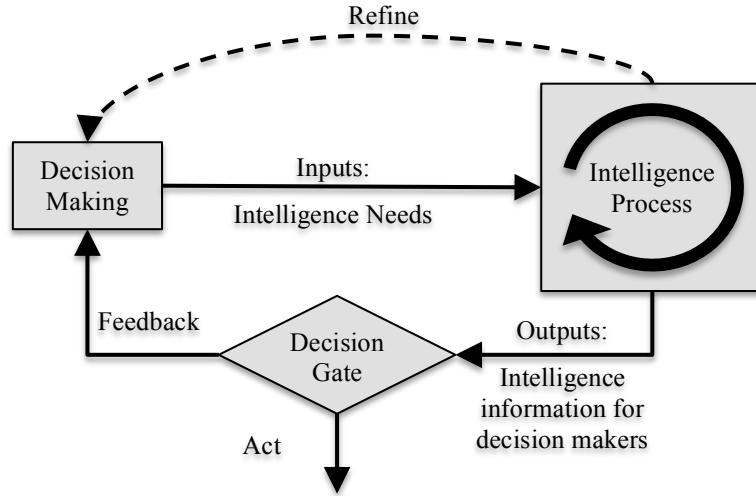


Figure 2. Intelligence Process (Mortara et al. 2009)

It permits us to consider that should have an alignment between business strategy and CI.

Competitive strategy

The concept of strategy has been studied since the start of Classical School that considers strategy as a product of strategic formulation process. In this perspective, the strategy should be well defined and structured, in most cases based on multiple analytical processes at different levels of response to competitive environment changes (Porter 1980). Over the past few decades, this concept had been evolved, but this classical perspective is widely used due to its analytical character that gives to decision makers a better understanding of how competition works (Powell and Bradford 2000). Considering several strategic diagnosis frameworks, industry analysis figures as one of the most referenced – it considers the intensity of five competitive forces that shapes strategy and interferes in its potential profitability, as shown in the Figure 3.

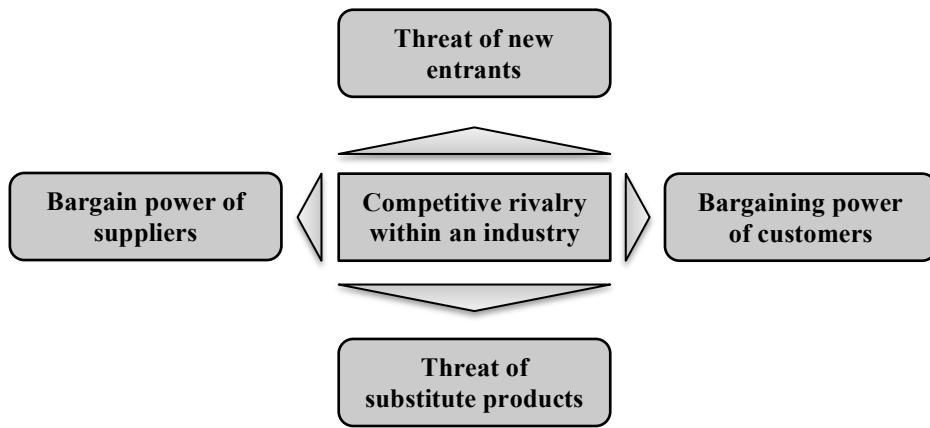


Figure 3. The five forces that shape industry competition (Porter 2008)

Porter (2008) points out that companies should enhance their strengths and weaknesses, so as to inspire its strategic position in the industry – it help them to identify alternatives that provide greater return while they consider the impact of environmental threats and opportunities. However, Carvalho and Laurindo (2003) state that sometimes these five competitive forces are

so evident to all competitors that it is not enough to measure its intensity only, companies need to understand the source of these forces – understanding the behavior of these sources of competitive forces enable the strategic decision maker to identify ways to compete in the market. These factors are identified by Carvalho and Laurindo (2007) and presented in Table 1.

Table 1. Sources of Competitive Forces (Carvalho and Laurindo 2007)

| | |
|------|--|
| 1. | Competitive rivalry within an industry |
| 1.1. | Competitors are numerous or balanced |
| 1.2. | Slow growth of industry |
| 1.3. | High fixed costs |
| 1.4. | No differentiation |
| 1.5. | Capacity increase in large increments |
| 1.6. | Competitors with divergent strategies |
| 1.7. | High exit barriers |
| 2. | Bargain power of suppliers |
| 2.1. | Suppliers' product is a critical input |
| 2.2. | Suppliers group consists of few companies and is more concentrated than the industry |
| 2.3. | Industry is not an important customer to supplier group |
| 2.4. | Suppliers' products are differentiated and there is no substitutes |
| 2.5. | Suppliers are a concrete threat of vertical integration |
| 3. | Bargaining power of customers |
| 3.1. | Customers are concentrated or acquire products in large quantities |
| 3.2. | Industry sales represent a significant fraction of customers costs |
| 3.3. | Industry product is standardized or it is not important to customers' products quality |
| 3.4. | Customers have full information |
| 3.5. | Customers group is a concrete threat of backward integration |
| 4. | Threat of new entrants |
| 4.1. | Necessity of scale economy |
| 4.2. | Reliance on patents |
| 4.3. | Difficulties of access to raw material |
| 4.4. | Existence of official grants |
| 4.5. | Learning curves |
| 5. | Threat of substitute products |
| 5.1. | Products that perform the same function |

This framework offers an objective structure for evaluate competitive force intensity.

Method

This research selected 30 CI analysts attending a MBA Program of Competitive Intelligence Management to apply a questionnaire in order to evaluate the level of alignment between their CI activities and its company's strategy. All the 28 questions are developed considering the sources of competitive forces showed in Table 1 and all of their answers are obtained according to the Likert Scale (1 - strongly disagree; 5 strongly agree) and they are analyzed by its arithmetic average.

The 23 initial questions aimed at evaluate the intensity (I) of each competitive force in the industry – it sentence represents one of factor identified in Table 1. The results are analyzed as below:

- Arithmetic average between 1 and 2 indicates that the intensity of the competitive force is irrelevant in strategic management;

- Arithmetic average between 2 and 3 indicates that the intensity of the competitive force is little relevant in strategic management;
- Arithmetic average between 3 and 4 indicate that the intensity of the competitive force is very relevant in strategic management;
- Arithmetic average between 4 and 5 indicates that the intensity of the competitive force is essential in strategic management;

The 5 final questions focus on understand the level of effort (E) that CI analysts applied in each competitive force – it is a proxy of what is the company's perception about its intensity. The results are analyzed as below:

- 1 – the company's effort is very low for this force;
- 2 – the company's effort is low for this force;
- 3 – the company's effort is average for this force;
- 4 – the company's effort is high for this force; and
- 5 – the company's effort is too high for this force.

Thus, if CI and competitive strategy are aligned, it is expected that I and E have the same value. Based on this hipotesys, this paper proposes that degree of CI strategic alignment (SA) can be evaluated by the relative deviation of I and E, calculated by Equation 1.

$$SA = \frac{E}{I} - 1 \quad (1)$$

Thus, it indicates that:

- If $SA = 0$, the CI effort is aligned to the strategic necessity;
- If $SA > 0$, the CI effort is greater than what is necessary to monitor the strength and thus there is an opportunity to rationalize the investment activity; or
- If $SA < 0$, the CI effort is less than what is necessary to monitor the strength and thus there is greater vulnerability to strategic surprises.

Findings

The results suggest that is some opportunities to increase the CI strategic alignment. Table 2 shows that companies tend to overvalue the expectation of information requiring the decision-making process in 4 of the 5 competitive forces – only *Threat of substitute products* is underestimate. Still, it is interesting to realize that the biggest CI effort of these companies is to scan the force *Bargaining power of customers*, followed by *Competitive rivalry within an industry*. On the other hand, *Bargain power of suppliers* receives the lowest attention of CI.

Table 2. Overview about CI strategic alignment

| Forces | Intensity | Effort | Alignment |
|--|------------|------------|------------|
| Bargaining power of customers | 3,0 | 4,3 | 42% |
| Competitive rivalry within an industry | 3,0 | 4,1 | 35% |
| Threat of substitute products | 4,0 | 3,6 | -10% |
| Threat of new entrants | 2,4 | 3,2 | 37% |
| Bargain power of suppliers | 2,1 | 2,4 | 13% |
| TOTAL | 2,9 | 3,5 | 21% |

An alternative way to visualize these results is presented in Figure 4. It shows graphically the alignment of CI and strategy by each force.

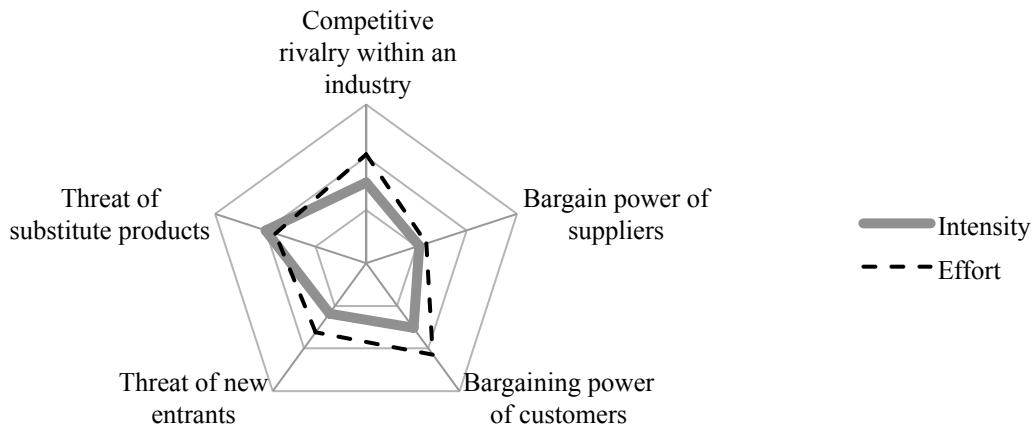


Figure 4. Degree of strategic alignment

However, it is important to present a brief description of research sample:

- 87% are services companies and 13% are from manufacture companies;
- 93% are large companies and 7% are midsize enterprises;
- 77% are Brazilian and 23% are foreign; and
- 90% are private capital and 10% are public.

Considering this profile, the results are analysed by 5 clusters defined below:

- Group 1: Large Brazilian private companies of services (17 companies);
- Group 2: Large non-Brazilian private companies of services (5 companies);
- Group 3: Private companies of manufacture (4 companies);
- Group 4: Public companies (3 companies); and
- Group 5: Other companies (1 company).

So, the following analysis focus on understands the behavior of CI strategic alignment of each competitive force.

Bargaining power of customers

According to these results, company's this competitive force indicates that its intensity is *very relevant* to almost all groups and, therefore, it is expected that the effort would be *medium* and *high*. In fact, Table 3 shows that there is more effort than necessary to scan this force.

Table 3. Strategic alignment - Bargaining power of customers

| Group | Intensity | Effort | Alignment |
|--------------|------------|------------|------------|
| 1 | 3,0 | 3,9 | 31% |
| 2 | 3,4 | 4,8 | 41% |
| 3 | 3,6 | 4,5 | 25% |
| 4 | 1,7 | 5,0 | 200% |
| 5 | 3,6 | 5,0 | 39% |
| TOTAL | 3,0 | 4,3 | 42% |

However, even if the companies' effort is high, it is not possible to infer that these resources are used effectively – it is a limitation of this method. Thus, the results do not mean that companies are taking advantages by the adoption of CI.

Competitive rivalry within an industry

This competitive force indicates a similar situation – its intensity is *very relevant* to almost all groups, except for the Group 1. Thus, it is expected that the scanning effort is also between *medium* and *high*, but the results in Table 4 indicates that there is some excess too.

Table 4. Strategic alignment - Competitive rivalry within an industry

| Group | Intensity | Effort | Alignment |
|--------------|------------|------------|------------|
| 1 | 2,8 | 3,9 | 39% |
| 2 | 3,1 | 5,0 | 61% |
| 3 | 3,6 | 4,3 | 19% |
| 4 | 3,0 | 3,7 | 20% |
| 5 | 3,6 | 3,0 | -16% |
| TOTAL | 3,0 | 4,1 | 35% |

Threat of substitute products

This competitive force is the only one that level of efforts is lower than its intensity. The evaluation shows that its intensity is positioned between *very relevant* and *essential* for all groups, thus it leads to assumption that the efforts should be ranked between *high* and *very high* – but the results in Table 5 show that it receive a *medium* to *high* effort.

Table 5. Strategic alignment - Threat of substitute products

| Group | Intensity | Effort | Alignment |
|--------------|------------|------------|-------------|
| 1 | 4,1 | 3,2 | -20% |
| 2 | 3,6 | 4,0 | 11% |
| 3 | 3,8 | 3,8 | 0% |
| 4 | 5,0 | 4,3 | -13% |
| 5 | 3,0 | 5,0 | 67% |
| TOTAL | 4,0 | 3,6 | -10% |

Just like in previous competitive forces, these results indicate that there are opportunities to align the actions of IC. However, this alignment has different propose, because the level of efforts on scanning it is lower than necessary. So, it is possible that coexist two difficulties for the management of IC activities:

- First, nothing in this method ensures the effectiveness of the efforts employed; and
- Second, this deficiency might create blind spots for the strategy – strategic decition making process would be disregarding certain aspects of this force that can be significant.

Threat of new entrants

The intensity of this competitive force is evaluated as *little relevant* in all groups. Thus, it is expected that the level of effort in its scanning is between *lower* and *middle*, which in practice has not been proved, as shown in Table 6. These results indicate that there are opportunities also alignment it, especially with cost reduction possibilities.

Table 6. Strategic alignment - Threat of new entrants

| Group | Intensity | Effort | Alignment |
|--------------|------------|------------|------------|
| 1 | 2,3 | 3,2 | 40% |
| 2 | 2,3 | 3,2 | 38% |
| 3 | 2,7 | 3,8 | 42% |
| 4 | 2,4 | 3,0 | 25% |
| 5 | 2,2 | 2,0 | -9% |
| TOTAL | 2,4 | 3,2 | 37% |

Bargain power of suppliers

According to these results, company scanning effort is the lowest in this competitive force. The evaluation of this force indicates its intensity is *not relevant* to most of the groups, thus it is expected that the companies' effort to scan is between *low* and *medium*. Table 7 show that it is the exact what happens with this force.

Table 7. Strategic alignment - Bargain power of suppliers

| Group | Intensity | Effort | Alignment |
|--------------|------------|------------|------------|
| 1 | 2,1 | 1,9 | -10% |
| 2 | 2,4 | 2,4 | 0% |
| 3 | 2,1 | 3,8 | 83% |
| 4 | 1,7 | 2,7 | 60% |
| 5 | 2,8 | 5,0 | 79% |
| TOTAL | 2,1 | 2,4 | 13% |

These results show that it is important promote a strategic alignment to the IC in all competitive forces.

Considerations

This research identify that there is a gap between CI literature and CI practice, especially regarding to CI strategic alignment. The literature points out this alignment as the most important key factor for the success of CI programs, but the results indicates that it is not a reality yet. In this sense, some methodological considerations need to be pointed out as limitations. First, the model for evaluating the CI strategic alignment should be considered as a first attempt to quantify this question – some aspects about CI effectiveness are not envolved in this model. Second, the sample selected is not intended to be representative of the situation of all companies operating in the Brazilian market.

References

Cabral Netto, O. 2007. **Inteligência competitiva: sistema aplicado ao mercado de crédito**. Trabalho de Conclusão de Curso. Departamento de Engenharia de Produção da Escola Politécnica da Universidade de São Paulo.

Cabral Netto, O. 2011. **Uma visão holística da inteligência competitiva para a construção de uma teoria**. Dissertação de mestrado apresentada à Escola Politécnica, Universidade de São Paulo, São Paulo.

Carvalho, M., Laurindo, F. 2003. **Estratégias para competitividade**. Futura, São Paulo.

Carvalho, M., Laurindo, F. 2007. **Estratégia competitiva: dos conceitos a implementação**. Atlas, São Paulo.

Du Toit, A. 2003. Competitive intelligence in the knowledge economy: what is in it for South African manufacturing enterprises?. *International Journal of Information Management* **23**(2): 111-120.

Erickson, G., Rothberg, H. 2009. Intellectual capital in business-to-business markets. *Industrial Marketing Management* **38**(2): 159-165.

Fatti, A., Du Toit, A. 2013. Competitive intelligence in the South African pharmaceutical industry. *Journal of Intelligence Studies in Business* **3**(1): 5-14.

Hall, C., Bensoussan, B. 2007. *Staying ahead of the competition: How firms really manage their competitive intelligence and knowledge; evidence from a decade of rapid change*. World Scientific Publishing Data, New York.

Jourdan, Z., Rainer, R., Marshall, T. 2008. Business intelligence: an analysis of the literature. *Information Systems Management* **25**(2): 121-131.

Kahener, L. 1996. **Competitive intelligence: how to gather, analyse, and use information to move your business to the top**. Touchstone Book, New York.

Lesca, N., Caron-Fasan, M. 2008. Strategic scanning project failure and abandonment factors: lessons learned. *European Journal of Information Systems* **17**(4): 371-386.

Momeni, A., Mehrafzoon, M. 2013. Critical Factors of Competitive Intelligence in the Power Plant Industry: The Case Study of MAPNA Group. *Journal of Intelligence Studies in Business* **3**(1): 31-43.

Mortara, L., Kerr, C., Phaal, R., Probert, D. 2009. Technology Intelligence practice in UK technology-based companies. *International Journal of Technology Management* **48**(1): 115-135.

Powell, J., Bradford, J. 2000. Targeting intelligence gathering in a dynamic competitive environment. *International Journal of Information Management* **20**(3): 181-195.

Porter, M. 1980. **Competitive strategy: techniques for analyzing industries and competitors**. Free Press, New York.

Porter, M. 2008. The Five Forces That Shape Industry Competition. *Harvard Business Review* **86**(1): 25-40.

Saayman, A., Pienaar, J., Pelsmacker, P., Viviers, W., Cuyvers, L., Muller, M., Jegers, M. 2008. Competitive intelligence: construct exploration, validation and equivalence. *Aslib Proceedings: New Information Perspectives* **60**(4): 383-411.

SCIP. 2007. The language of business intelligence. Available at www.scip.org (accessed date April 4, 2007).

Sewlal, R. 2004. Effectiveness of the Web as a competitive intelligence tool. *SA Journal of Information Management*, **6**(1).