Relationship of Competitive Intelligence with The Organizational Flexibility (Case study: small companies)

Alireza Nazar1*, Ehtesham Seidali Route2

1Department of Industrial Management, Faculty of Management, Firoozkooh Branch, Islamic Azad University, Tehran, Iran, 2Department of Business Management, Payame Noor University(PNU), Tehran, Iran.

*E-mail: N.alireza349@yahoo.com

Abstract
Nowadays, companies must accept that philosophy of their lifetime has been changed and it is necessary to seek how to fit the turbulent business environment in the direction of maintaining a competitive edge. With no doubt, deal with new items is going through science and technology. Here, the subject of competitive intelligence comes to help companies with continuous process to make informed decisions about all their affairs, such as marketing, research and development, investment and business strategy. So the organization can demonstrate good organizational flexibility against changes that were imposed. In this study the relationship between competitive intelligence and organizational flexibility has been investigated. For this purpose first the research literature in the field of competitive intelligence and flexibility of its models was described. The findings suggest that there is the positive relationship between competitive intelligence with significant organizational flexibility. And such dimensions as knowledge of the market situation, competition situation awareness, awareness of technology - technical, strategic- social awareness have a positive and significant relationship with organizational flexibility.

Keywords: Competitive Intelligence; Organizational Flexibility; Small companies; Situation of market

Introduction
Today's world is changing fast and successful adaptation, is an essential part of success in the modern era (Englehardt and Simmons, 2002, p113). On the other hand, globalization, information explosion and technology development provided quick access to information fields. In current conditions, World trade has grown and competition increased in business space. So that quick changes and Successful adaptation are an important parts of organizational success, in the present era. High speed evolution in the environment and competitive of markets, created additional pressure on organizations to quickly adapt and led to changes in the high levels. Thus business should be enough flexible to manage unpredictable threats and existing opportunities, in the uncertain future and volatile environment. Without a doubt, the face of the new situation will be through science and technology. So the mastery of new technology like competitive intelligence in business is considered as an imperative and an inevitable necessity (Beikzadeh, 2011). Because of changes in technology and business, threatening the survival of organizations a small number of intelligence agencies can change their internal and control affecting foreign forces. So the competitive intelligence is collecting of information about the environment and competitors in order to create and maintain a competitive edge. Competitive Intelligence is a systematic process to ensure accurate and relevant information to competitors are up to date (McGonagle and Vella, 1999). In the importance of competitive intelligence should say, with regard to the competitive intelligence is as a strategic management tool and one of the fastest growing areas of the business world, So this is one of the important techniques in the creation of competitive advantage (Davis, 2004). At the present
time many changes have occurred in all organizations. And collecting and evaluating information about competing firms in formulation of strategies is critical. Whatever company can obtain more information from competing firms, the possibility that develop and implement effective strategies and successful, is more (David, 1999).

So tracking, understand and react to competitors are as a special aspect of the marketing activities (Callow and Pickton, Wright, 2002), and it is essential that companies have an effective program to implement the competitive intelligence (David, 1999). Management literature shows that flexibility is considered as a "good work" (Adler, 1988, p36). However, is not an "absolute good". On the other hand flexibility to fit the turbulent business environment in order to maintain a competitive advantage is one of the main challenges facing managers (Hatum and Pettigrew, 2006, p115). and companies can flexible quickly and smoothly on the basis of its axial values, change in their own.

Flexible companies have tied values with innovation and change. On the other hand, one of the issues raised about the organizational flexibility is its role in the success of organizations. In the past two decades, flexibility increasingly emphasized as an organizational capability that will enable companies to obtain and maintain competitive advantage and improve business performance and competitive environment are dynamic date "(Zhang, 2005, p165). Peters (Peters, 1991, p635) proposes guidelines to become a successful business. He concludes that the rules and the main fact, the need to obtain and maintain flexibility. He points out that each of these guidelines are with the aim of progress in gaining flexibility. " Pasmore " (Pasmore, 1994, p 4) believes that a more flexible organization causes organization according any changes, have more responsive. Therefore this study the relationship between competitive intelligence and organizational flexibility in small companies that do not always respond quickly to a changing environment. Because competitive intelligence due to its intrinsic structure can be used for all companies, even small companies. And the flexibility of an organization spends a lot of time and cost, competitive intelligence can be a factor to accelerate this matter.

**Literature Review**

**Competitive Intelligence**

The organizational intelligence refers to education and knowledge and is done through the use of human, computers and other equipment. And considered knowledge of the organization activities related to the environment (both indoor and external environment) (Trim, 2002). Competitive Intelligence is gathering information about the competition environment to create and maintain competitive advantage. Competitive Intelligence is a systematic process to ensure updating the detailed information related to competitors (Vella McGonagle and, 1999). So competitive intelligence can be delivered in three phases:

1. Market Intelligence: This type of intelligence is assessment of changes in competitive strategy in the timeframe determined that have been made from changes in the structure of competition, new alternative products and newcomers of industry.

2. The related intelligence to competitors: This type of intelligence is assessment of changes in competitive strategy in the timeframe determined that have been made from changes in the structure of competition, new alternative products and newcomers of industry.

3. Technological intelligence: In this type of intelligence, cost of benefit in current and new technology has been assessed, technology changes anticipated (Dschambz and Nayak, 1995).

Of course competitive intelligence can be of these three groups, such as strategic and social intelligence added to this classification. Strategic and social intelligence include about laws, taxation...
and financing of political-economic issues and also human resources and social issues, (DANIEL ROUACH, 2001).

On the other hand integration process is competitive intelligence and competitive Intelligence process is made from four stages of planning and guidance, data collection, analysis, publication (Wright, 2002) So a competitive intelligence system refers to a set of applications and resources by managers used in order to access routine information marketing environment (2002, Kotler).

However, competitive intelligence collect further information in relation to market research (Weight and Ashill, 1998). Competitive intelligence of managers, should increase through cycle of the information and information convert to discovery intelligent. This means can use resulting intelligence, in the decision making process and evaluation of information and it’s ability to transfer considered main purpose of ingenious. (DANIEL ROUACH, 2001)

Competitive Intelligence been investigated from three aspects (Vriens, 2007):
• The share of Competitive Intelligence
• Competitive Intelligence as a product
• Competitive Intelligence as a process

In the following figure that is known pyramid of Joseph Rodenberg. It is shown how valuable to simple data underlying of the pyramid, produced finally intelligence.

![Pyramid of Joseph Rosenberg](image)

**Figure 1: Pyramid of Joseph Rosenberg**

From the perspective of the French Management School (GTILAB), the concept of competitive intelligence is divided into four main categories:
• awareness of situation of market: which is mainly information about customers, suppliers, buyers and distributors will be collected and analyzed.
• awareness of situation of competitors: that focus on issues such as pricing policies, alternative products and policies of development competitors.
• awareness of technique and technology: that are basic and applied research, factories, processes and norms and patent rights.
• awareness of social strategic: that are issues such as law, finance and tax, political issues, economic and social aspects of human resources.

These four types of information that can be discussed in many organizations, mainly to observe and analyze behavior and social trends. (Right Najafi, 3: 2004).

**Flexibility**

Smaller companies need flexibility to adapt to the changing environment, which seems in organizations the flexibility depends on level of competitive intelligence of organization. The flexibility concept that can be understood from multiple ways and at very different levels. In the broadest form, likely the best knowing of flexibility, is a modal that cause an entity adapt with changes in demand that it is imposed. Charm of flexibility as a concept can found its opposites (inflexibility, rigidity, etc.) that all are negative connotation (Tom Redman, 2009).

Flexibility is a broad concept that can be linked to many elements in the organization. Such as operations, marketing, human resources, structure, strategy and ... several amendments may be considered as a synonym for flexibility. Adaptability, agility. Flexibility is considered as a dynamic capability. (Tansuhai, Johnson, 2003) Dynamic capabilities as a set of processes that enable to integrate and coordination of resources, Specifically is done for corporate performance in the environments that technological change is fast in them or is essential for changing important markets.

The concept of flexibility can be measured with two main objectives. External flexibility is achieved through diverse patterns of investment in the market and internal flexibility is achieved through floating resources. (Caret & March, 1963) As well as flexibility and ability of enterprises for dealing and reaction to different types of environmental competition, pressure of a new product and creating technology to provide and develop a good market and appropriate divide of products (Sanches 1995).

Internal and external areas of flexibility in the organization include the components that determine the compliance of the company with the changes. If company managers can predict changes, they can choose the most cost-effective option in a better position and conditions. In the organizational context, the concept of more flexibility refers to the ability to unforeseen changes. Internal flexibility is the ability of organizations to compromise with the environment. While external flexibility refers to the ability to impact on the environment. As a result, reduces vulnerable. Organizations must not only focus on changes in the environment but also at the same time should have the ability change on environment. (Vardu & Jose, 2009)

Pass Moore believes that being more flexible to an organization causes that the organization have better response to changes, when used the term flexibility everywhere. The meaning of concept is not clear (Evans, 1991).

In general, flexibility can be considered as an indicator of the link between system and environment to attract foreign uncertainties, the dynamics of the system as well as the ability to change and adapt (Toni & Tonchia, 2005) in the past two decades, the flexibility increasingly stressed as an organizational capability, which enables companies to gain a competitive edge and keep it working and improve performance in today's dynamic business environment and are competitive (Zhang, 2005) and Researchers have tried to study different aspects of organizational frameworks to offer flexible patterns. Types of this model include:
1. Specialization of flexibility:

Pior and Sable suggest that the flexible organization has four features. Flexibility and specialization through reorganization, rather than production and new computer technologies, limited entry to the market and create rules to prevent destructive competition (Dyer, 1998).

2. Flexible company (Atkinson):


1) Functional flexibility: This model includes the ability of a company to set up and use the skills of its employees to comply with its obligations due to changes in workloads, imposed on production technology methods. So this model is simply the movement of workers between tasks and jobs. (Nardman, 2011, p. 336)

2) Numerical flexibility: numerical flexibility, as its name implies. On the number of employees and shows how the company can change the number of staff to respond to fluctuations in demand for workers. This model includes the ability to manage in development and create diversity in the number of workers employed, which can be achieved through policies related to employment and extraction.

3) Finance flexibility: this template can be through diversity in payment. Application of this model allows to companies increase or reduce amount accounts payable to employees based on corporate performance. Participation in profit and share in results obtained are examples of the flexibility of finance. (Daneshvar, 2007).

3. Ansoff model:

Ansoff is founded this framework based on the relationship between the organization and the environment. He suggested that flexibility be classified into two categories: internal flexible and external flexibility. Foreign flexibility to create diverse pattern of investment product related to market and internal flexibility related to liquidity of company resources. As internal flexibility occurs when a business seeks to establish an infrastructure to deal with sudden events. Internal flexibility attempts to control the environment through low investment. External flexibility builds various products and multiple markets to minimize the impact of sudden events, and the company will lead to parts that cannot penetrate. External flexibility divided to flexibility defensive (ward off sudden events) and offensive flexibility (to create opportunities for market penetration) (Ansoff, 1988).

4. Vollberda Model:

Vollberda offers a strategic framework of flexibility that focus on creation and implementation of flexibility in the organization. He identified three forces that can solve the paradox of flexibility: Capability of management, organization design and the impact of changing competitive forces. By considering these 4 types of forces determines the flexibility: Fixed status, operational, structural and strategic (Vollberda, 1998, p117)

Stable flexibility (low variety, low velocity):

Includes static guidelines to maximize corporate performance, when the performance level is relatively constant during the time. This type of flexibility, it does not seem really to fixed conditions, speed of limited changes and diversity is low and gradually anticipating and responding to external conditions is possible.

Operational flexibility (low variety, high velocity):

The most common type of flexibility in relation to the amount and composition of activities. They provide operational flexibility, rapid response to specific changes that, such as changes in
production capacity, raising inventories and maintaining of capacity, shorten the production cycle and the use of temporary personnel. Operational flexibility can be internal or external

![Figure 2: Types of flexibility from the perspective of (Vollbedra, 1998)](image)

Structural flexibility (high variety, low velocity):
Including managerial abilities for flexibility of structure and decision making and creating new communication processes to suit changing conditions. When faced to the revolutionary changes the structure of management needs to flexibility of to facilitate the modernization of existing processes. The work is in supporting and maintain new technologies or product development or new markets.

Strategic flexibility (high variety, high velocity):
Including management capabilities in relation to the organizational goals and environmental changes. This fundamental type of greater flexibility involves quality and changes in the identity of the organization's activities. Strategic flexibility is essential when organization face to unknown changes in the results of its extensive and require quick response.

It seems that small companies were not able to respond quickly to changes in the competitive environment and are adapting to these changes. Phenomena in this organization need to have intelligence that can obtain information from their environment and analyze it. In this paper, we consider to examine the relationship between competitive intelligence and flexibility.

**Research questions**
The main question:
1. Is a significant positive relationship between competitive intelligence and corporate flexibility?
Sub questions:
1.1. Is a significant positive relationship between the company aware of the situation of competitors and flexibility?
1.2. Is a significant positive relationship between aware of the market situation and flexibility companies?
1.3. Is a significant positive relationship between the companies technical knowledge and technology with the flexibility?
1.4. Is a significant positive relationship between the community aware of the strategic and corporate with the flexibility?
**Research Model**

In the current study to investigate the relationship between competitive intelligence managers and flexibility of organization is used flexibility of Dschampes and Nayak model (1995) and flexibility of Tranbury (2002).

![Diagram of competitive intelligence and flexibility models](image)

**Figure 3: The conceptual model of competitive intelligence by using Napack Dschampz (1995) and flexibility of organization by using Trenbury (2002)**

**Research Methodology**

Present study in terms of purpose is functional and in terms of data collection method is descriptive and correlational. In this study statistical population included 69 managers and employees of small companies are located in the industrial town of abbas abad in Tehran. The number of which amounted to 2736 people and to select the sample size was determined by using Cochran formula 337 people. In this study, sampling method is simple random sampling without replacement. Self structured questionnaire was used to collect information. To confirm validity of questionnaire were used from content validity. So that 4 academic experts in the field of marketing, confirmed the validity of the questions. Cronbach's alpha coefficient was used to estimate questionnaire reliability and its value was 0.82. That is right amount for reliability.

Data analysis in descriptive statistics of researcher has used frequency tables and frequency percentage and the percentage of cumulative frequency and circular diagrams to describe the questionnaire. And in inferential, normality test data has used Kolmogorov - Asembernof, And to test the hypothesis has used parametric test of Pearson correlation coefficient.

**Analysis of the research questions:**

The main question: Is a significant positive relationship between competitive intelligence and corporate flexibility?

<table>
<thead>
<tr>
<th>Table 1: Correlation Table of competitive intelligence and flexibility:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>competitive intelligence</td>
</tr>
<tr>
<td>organizational flexibility</td>
</tr>
</tbody>
</table>

In table 1 there is value and according to it, can be concluded that the correlation is from direct type and such, interpreted that between competitive intelligence and organizational flexibility exist a significant and positive relationship and this correlation is average. This means that by using competitive intelligence on small companies increase their flexibility.

Sub-question 1.1: Is a significant positive relationship between the company aware of the situation of competitors and flexibility?
Table 2: Awareness correlation table of the market situation and flexibility

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>correlation</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>competitive intelligence</td>
<td>4.57</td>
<td>0.917</td>
<td>0.683</td>
<td>0.0061</td>
</tr>
<tr>
<td>organizational flexibility</td>
<td>4.74</td>
<td>0.855</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 2 there is value and according to it, can be concluded that the correlation is from direct type and such, interpreted that between awareness of the market situation and organizational flexibility exist a significant and positive relationship and this correlation is average. This means that by using awareness of the market situation on small companies increase their flexibility.

Sub-question 1.2: Is a significant positive relationship between aware of the market situation and flexibility companies?

Table 3: Awareness correlation table of competitors situation and flexibility

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>correlation</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>competitors situation</td>
<td>4.45</td>
<td>0.894</td>
<td>0.661</td>
<td>0.000</td>
</tr>
<tr>
<td>organizational flexibility</td>
<td>4.74</td>
<td>0.855</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 3 there is value and according to it, can be concluded that the correlation is from direct type and such, interpreted that between competitors status and organizational flexibility exist a significant and positive relationship and this correlation is average. This means that by using competitors status on small companies increase their flexibility.

Sub-question 1.3: Is a significant positive relationship between the companies technical knowledge and technology with the flexibility? Table 4: Awareness correlation table of technical-technology status and flexibility

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>correlation</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical-technology status</td>
<td>3.8</td>
<td>0.985</td>
<td>0.571</td>
<td>0.011</td>
</tr>
<tr>
<td>organizational flexibility</td>
<td>4.74</td>
<td>0.855</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 4 there is value and according to it, can be concluded that the correlation is from direct type and such, interpreted that between technical-technology status and organizational flexibility exist a significant and positive relationship and this correlation is average. This means that by using technical-technology status on small companies increase their flexibility. Strategic social status.

Sub-question 1.4: Is a significant positive relationship between the community aware of the strategic and corporate with the flexibility?

Table 5: Awareness correlation table of strategic-social status and flexibility

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>correlation</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>strategic-social status</td>
<td>4.1</td>
<td>0.819</td>
<td>0.612</td>
<td>0.000</td>
</tr>
<tr>
<td>organizational flexibility</td>
<td>4.74</td>
<td>0.715</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In table 5 there is value and according to it, can be concluded that the correlation is from direct type and such, interpreted that between strategic-social status and organizational flexibility exist a significant and positive relationship and this correlation is average. This means that by using strategic-social status on small companies increase their flexibility.

Conclusions

The purpose of this study is trying to evaluate relationship between competitive intelligence with organizational flexibility. To improve the business small of companies, not only small
companies but also large companies have focused their attention to the future and warnings awareness in relation to the opportunities and threats environmental. So they can have adapted to changes in the competitive environment. Based on the results obtained by Pearson correlation test in relation to these factors can be concluded that competitive intelligence factors such as (awareness of market situation, awareness of competition situation, awareness of technologies-technical situation and awareness of socio-strategic situation) are positive and significant relationship with organizational flexibility and the use of each of this flexibility will help them. Small companies with an awareness of situation of supply and demand, changes in customer requirements, new product can be decentralized decision-making process within the company, and channels of communication flow in the company have changed that sensitive information that reaches of the market situation to company, be faster, with greater accuracy and far from pollution usual information. Also awareness of the competitive situation in the market and identify new competitors market and their innovations, knowledge of the market leaders and their strategies in pricing can also change the organization. And lead to reduce the complexity and less formal small firms and cause fractured traditional structure to compete with new competitors innovation and choice more flexible structure to director of the company.

Also, understanding of used technology in all company processes (production, packaging, marketing, sales and transportation) can cause that the company can react more quickly to changes in imposes environment and competitors in the market use every opportunity to create a competitive advantage in this area.

Also, having flexible and short term and long term strategies that can conforms to sudden changes in the market and operating environment and can cover society's needs, is affecting factor in flexibility of organization.

References
Englehardt, C. S. and P. R. Simmons (2002). Organizational Flexibility for a changing world, Leadership & Organization Developing Journal, ¾(23), 113-121
McGonagle, J. J. and Vella, C. M. (1999), The Intelligence Age of Competitive Intelligence .Greenwood Publishing Group, Inc., Westport, CT.
Najafi Haghi, J. (2004), Competitive intelligence, Tadbir, No. 154
Trim, P. R. J. (2002), Corporate intelligence and transformational marketing in the age of the internet, Marketing Intelligence & Planning, 20(5), 259-68.

Openly accessible at http://www.european-science.com
