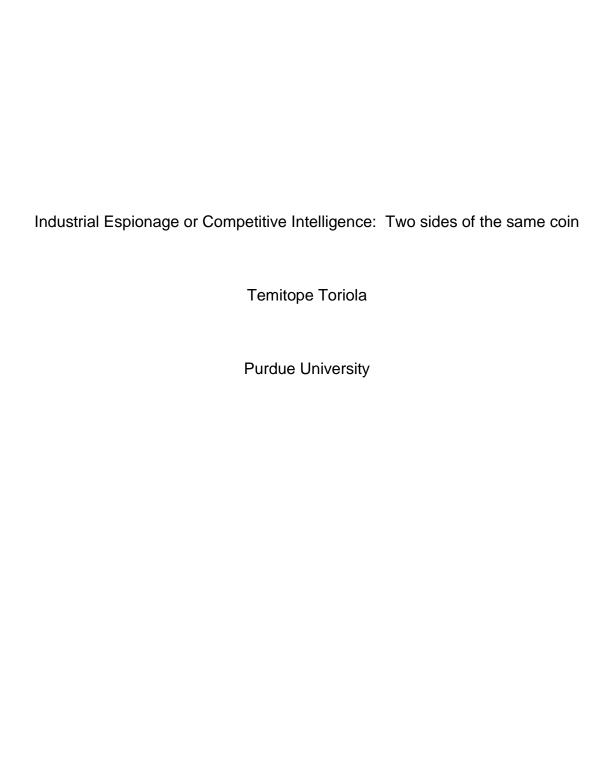
# **CERIAS Tech Report 2011-10**

Industrial Espionage or Competitive Intelligence: Two sides of the same coin by Temitope Toriola

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Abstract

Attempting to gain a competitive advantage is the nature of most business research.

However, Industrial espionage is disallowed and frowned upon. Competitive

Intelligence is considered to be a lesser evil of Industrial Espionage. This paper

discusses the differences between the two and examines the Competitive Intelligence

industry. Within the Competitive Intelligence industry there are guidelines on successful

and ethical methods for data gathering. The following is a sample of industry topics and

methodology.

Keywords: Industrial Espionage, Competitive Intelligence

Industrial Espionage or Competitive Intelligence: Two sides of the same coin

Industrial Espionage carries many stigmas associated with it. Many people think of an employee sneaking some form of proprietary data out of his workplace in a briefcase and later meeting up with a representative from a competitor at a coffee shop and handing over the stolen information for a certain amount of tangible value.

Competitive Intelligence however is a more politically correct way of conducting the same objective. In order to understand the similarities, each must be thoroughly defined.

Industrial Espionage (IE) is the gathering of proprietary information between competitors. IE usually consists of illegal behavior such as theft, bribery, blackmail and occasionally covert operations like hidden surveillance. A common objective in IE is to sabotage a competitor.

Competitive Intelligence (CI) is a more ethical approach of gathering information about competitors. The information collected is usually public knowledge that is analyzed to seek out potential weaknesses and formulate strategic plans. The goal in CI is to gain a competitive advantage.

Two subsets of Competitive Intelligence are Business Intelligence and Marketing Intelligence. Business Intelligence (BI) is usually conducted internally on an organization to determine changes that need to occur based on past experiences.

Marketing Intelligence (MI) is the analysis of the market or industry customer base. MI takes into consideration customer preferences based on market research as well as supply and demand statistics.

CI has evolved into a legitimate industry. Consultants are hired by corporations to perform CI on competitors. The Strategic and Competitive Intelligence Professionals (SCIP), formerly the Society of Competitive Intelligence Professionals is a CI professional organization founded in 1986 dedicated to "providing education and networking opportunities for business professionals" in the CI field. (SCIP 2011) SCIP defines CI as "the legal and ethical collection and analysis of information regarding the capabilities, vulnerabilities, and intentions of business competitors." SCIP has established the Competitive Intelligence Foundation (CIF) a research and publication division of the organization. (SCIP 2011) 'SCIP.insight', Competitive Intelligence Review and the Journal of Competitive Intelligence and Management, are industry journals that keep consultants abreast of modern trends in CI.

"In reviewing the CI and MI literature, two themes appear to emerge:

- (1) defining what intelligence is (conceptual models); and
- (2) the assessment of company intelligence capability." (Calof & Wright 2008)

Now that the definitions have been reviewed the second issue is CI capability. A formal strategy for CI investigation is a five step approach: Planning/Direction, Collection, Analysis, Dissemination, and Feedback.

- The Planning and Direction phase is the initial goal finalization of what exactly it
  is that the company is seeking, sometimes referred to as the "managementneeds identification process". (Herring 1999)
- The Collection phase is the selection of sources and the gathering of potentially useful information.
- The Analysis phase is the evaluation of data to identify patterns and retrieve intelligence from it.
- Dissemination is simply the complete report of CI findings.
- Feedback is the evaluation of the impact of the CI.

## **PLANNING AND DIRECTION**

The Planning and Direction phase includes the development of Key Intelligence
Topics (KITs) used by many companies to identify principal intelligence needs. The KIT
is an adaptation of the National Intelligence Topics (NIT) a "process for identifying
national-level intelligence requirements." (Herring 1999) The KIT assists with identifying
the organization's key intelligence needs. Kit protocol is:

 <u>Strategic Decisions and Actions</u> - including the development of strategic plans and strategies.

- <u>Early-Warning Topics</u> including competitor initiatives, technological surprise, and governmental actions.
- <u>Descriptions of the Key Players</u> in the specific marketplace, including competitors, customers, suppliers, regulators, and potential partners. (Herring 1999)

#### COLLECTION

According to Weiss and Naylor, two industry consultants, talking to knowledgeable sources is the most valuable tool in CI. Conducting interviews of sources close to the competitor is a useful strategy. Competitor Ex-Employees are a valuable source that have insider information about the company but are not bound by non-disclosure contracts. Current employees are also a good source but interviewing them requires a more tactical approach, to be explained in further detail below. Stakeholders may also have access to inside information. Customer satisfaction statistics are beneficial. Collecting data on win/loss scenarios can be used to compare successful and unsuccessful market results to determine which products customers prefer and guide competitor production. In turn suppliers have the same significance. Purchases made by a competitor may have clues as to production or development. Another CI tool is gathering product details. Examining patent applications may give development hints as well. Current trademarks may also help gain insight on production information. Technical documentation is a good source of product details that can be used advantageously. Trade shows is an excellent place to find industry experts that may have useful information. Questioning the competitor's exhibit booth

personnel is an inconspicuous method of gathering information. Attending the competitors conference presentations can be a useful production source. Even fellow attendees can turn out to be unexpected sources of CI information. (Weiss & Naylor 2010)

Another method of Competitor Profiling is data mining of public sources. This can be accomplished through many methods. For example, the analysis of news stories and magazine articles for tips on competitor issues. Some leaks may come from social networking pages of current employees and executives. Blogs, Twitter accounts, Facebook pages, are all examples of notable sources for accidental disclosures.

Web and text mining can be conducted by performing deep web search approach. Google's fieldcodes can be used for search engine optimization. Attempting identical searches on alternative search engines, Bing, Yahoo, etc. might give diverse results. Searching with specialist tools such as Google Scholar and pay-to-use services such as Factiva, Lexis-Nexis and Dialog can provide more accurate technical results.

"One of the newest sources of competitive advantage is the structuralorganizational intelligence (SOI), which includes all non-human reserves of knowledge
in the organization embracing databases, organizational charts, executive instructions
of the processes, strategies, administrative programs, and suchlike items whose
significance for the organization is higher than its material value." (Zangoueinezhad and
Moshabaki 2009)

Most CI is contracted work performed by consultants. Companies benefit more by outsourcing CI investigations. Contractors conduct analysis with an objective perspective (as opposed to subjective). The knowledge base, experience, resources and skill that contractors offer are an exceptional asset to companies seeking CI. Contracted Independent Information Professionals can be former employees of competitor or consulting groups.

In her article Naylor details two techniques of performing CI. The first is Naylor's Rules of Primary Intelligence Gathering.

- Naylor's First Rule of Primary Intelligence Gathering Think about what will motivate a person to share with you.
- Naylor's Second Rule of Primary Intelligence gathering Do your homework on all angles before dialing!
- Naylor's Third Rule of Primary Intelligence gathering Be respectful of the other person's time. (Weiss & Naylor 2010)

The next strategy she refers to as the 4 Ps for Cooperative Communication. Navlor suggests this strategy for cold calling sources as a way to build trust. Before cold calling it is a good idea to research your source.

### 4 Ps for Cooperative Communication

- <u>Profession</u> What do they do for a living? What is their job title? How are they rewarded at work?
- <u>Politics</u> What is highly valued in this company's culture? What should I not ask or talk about?
- <u>Predisposition</u> What is this person's Myers Briggs personality style? How do
  they like to be communicated with? Think about DISC (dominance, influence,
  steadiness and conscientiousness), which measures four dimensions of their
  behavioral response.
- Personal Issues Age, gender, sexual preference, marital status, thin/fat,
   culture, religion, education, family situation, prior work experience, relationships
   outside of work, a cause they support, life style, hobbies. (Weiss & Naylor 2010)

Crafty contractors have collected CI from device residual data. There is a "risk to an organization as the result of the disposal of obsolete storage and communication devices." (Sutherland 2008) Data can be retrieved from hand held devices and hard drives using cyberforensics tools such as Forensics Tool Kit and EnCase. The "amounts and types of information that remained on disks offered for sale on the second hand market through various channels including on-line auctions... a significant number of corporate disks were recovered, some containing sensitive corporate data." (Sutherland 2008) This is due to inappropriate disposal of devices that contain corporate information, such as company issued Blackberry cell phones and PDAs.

Encryption of the data contained on the device was a good method for protecting data that was not deleted upon disposal.

#### **ANALYSIS**

One common analysis method is the SWOT (strength, weakness, opportunity, and threat) analysis framework. "Strengths and weaknesses are "internal" evaluations of the company's competencies, whereas opportunities and threats are "external" evaluations about the industry or market within which the company does business." (Bose 2007)

According to Bose, the fundamental forms of analysis are: deduction, induction, pattern recognition, and trend analysis.

- <u>Inductive reasoning</u>: the ability to combine separate pieces of information or specific answers to problems, to form general rules or conclusions.
- <u>Deductive reasoning</u>: the ability to apply general rules to specific problems to come up with a logical resolution.
- Pattern recognition: the ability to identify or detect a known pattern (a figure, word, or object) that is hidden in other material.
- Trend analysis: phase of the CI process thus turns raw data (a collection of facts, figures, and statistics relating to business operations) into actionable intelligence (data organized and interpreted to reveal underlying patterns, trends, and interrelationships). (Bose 2007)

#### **DISEMMINATION**

The Dissemination phase of the CI process is the delivery of gathered intelligence to the requesting company. "The results of the CI process need to be communicated to those with the authority and responsibility to act on the findings. Intelligence communication can take place via ad hoc reports, alerts, e-mails, presentations, news briefs, competitor files and special memos" (Saayman et al 2008) The consultant must organize findings and convey them diplomatically.

#### FEEDBACK

Feedback is the acceptance or rejection of the CI information by the requesting party. They then determine if their objective was met and what types of future CI may be need to meet other goals. The feedback process can be a comparison of results in contrast to the management-needs identification process and KIT from the planning phase.

Using the methods above companies are able to ethically gain inside information about competitors. The CI process is carefully designed to aid skilled professionals in an industry that is often precarious. CI is an adapting industry; in the future the CI process must be adjusted to meet the requirements of technological advances. Even though CI is an ethical alternative to IE, it is not without its own risks. In the wrong hands CI can be manipulated into IE. One question that comes to mind about outsourcing CI work is: Are the consultants trusted? It is possible for a consultant to

return information to the competitor about the CI request. Hence, another topic of interest is corporate counterintelligence. "Counterintelligence describes the steps an organization takes to protect information sought by hostile intelligence gatherers." (SCIP 2011) More specifically steps that a company can take in order to protect themselves from successful CI gathering. Perhaps future research will offer more detail into these issues.

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