Alignment and Integration of Competitive Intelligence Systems: A Case Study

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INTRODUCTION

'Competitive intelligence (CI) is organized, structured information gathering, analysis and processing to enhance strategic decision-making. It is used by businesses to gain a competitive edge by learning about suppliers, customers, regulators and competitors. It is used by business people looking to gain an insight into the future of their business, make more effective decisions…'(Cook & Cook 2000, p5). For all the functions of CI, an enterprise must set up a CI system working throughout the whole organization, which requires that a high level of understanding and awareness of CI pervades every aspect of the organization (Pole, Madsen & Dishman 2000).

Studies show that CI plays a very important role in business success (Behnke 2001). However, there exist barriers to applying a CI system in organizations, e.g. insufficient funding, internal bureaucracy, lack of sufficient skills and experience in intelligence teams. Particularly, many companies are not clear about how to setup a CI system that is integral with their current organizational structure (Swartz 2005). This paper provides a case study which shows how Company X (for confidentiality, the company cannot be named in this paper) sets up a virtual CI system that is aligned and integrated with its current management system and how the CI system is operated effectively within the company's activities.

Company X is a Chinese hi-tech company in the telecommunication industry providing customized network solutions for telecom carriers around the world. With its aggressive sale strategy, fast response services and new product development, the company has achieved a leading position in Chinese telecommunication markets within less than 20 years. Its competitors include a number of telecommunication equipment big players, e.g. Lucent, Ericsson, Nokia, Motorola and Cisco. Among the factors contributing to the company's success, its CI system plays an important role. This paper analyzes the company's CI system from the following aspects: 1) the structure of the CI system, 2) people in the CI system, 3) the CI process, and 4) cultivating a CI culture in the organization.

This paper starts with a general discussion of the CI system of the case company, followed by an analysis of key issues and problems identified through the case study. A brief conclusion is made at the end.

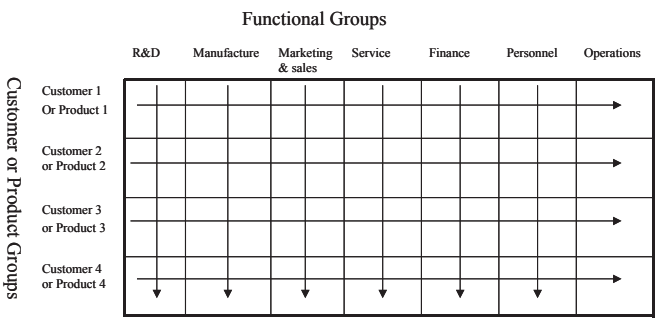
COMPETITIVE INTELLIGENCE SYSTEM IN COMPANY X

The Structure of the CI System in Company X

Research (Behnke 2001) shows that an integral CI team is characteristic of successful CI programs. Company X does not have a dedicated CI department. The CI team at Company X is a "virtual team" i.e. every employee takes the responsibility of CI and contributes to the CI system. The virtual CI system is integrated with the management structure of the company which achieves high efficiency in monitoring, collecting, analyzing all aspects of competitive information to support decision-making and daily operations.

The company adopts a matrix organizational structure as shown in Figure 1. There exist seven main functional departments: products research and development, manufacturing, marketing and sales, service, finance, human resource, and operation. At the same time, the company comprises several multi-functional groups that are organized according to customer groups or product types. The matrix organization structure facilitates speedy operation and decision-making because the functional teams can monitor their own localized business environments and move quickly to adapt to changes in them (Senior & Fleming 2006). Indeed, such organizational structure in Company X provides a good culture to build an efficient CI system while it also increases complexity of the CI system.

Figure 1. The company's organizational structure



The structure of the CI system in company X (Figure 2) follows its organizational structure. The virtual CI system in this Company is divided into three levels: (1) a virtual CI team under each functional group and multi-functional groups; (2) the CI coordinators in each business unit, e.g. the departments, representatives, overseas office, and call center; and (3) employees. The CI team in each functional group or multi-functional group administrates the whole CI system. They also undertake marketing, service and other research. The CI team members' responsibilities include (1) monitoring, collecting and analyzing information from external public information resources, e.g. internet, newspaper, journals, third party's report; (2) collecting and analyzing the information from the CI coordinators in each business unit; (3) intelligence dissemination; (4) conducting specific competitive intelligence research and surveys; (5) contacting consult or marketing research companies if a need arises; (6) supervising and measuring the CI works of CI coordinators; and (7) providing executives and employees with CI training and CI services. The CI coordinators' responsibilities include (1) collecting CI information from employees, customers, and any legal CI resource, (2) preparing for and submitting CI reports for the business unit that he/she works in, (3) helping conduct special CI research and surveys, (4) collecting CI needs and submit them to the CI team, and (5) providing the CI service to his/her colleagues.

Figure 2. The structure of CI system

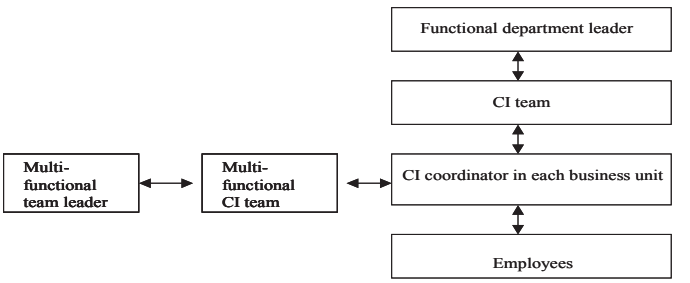


Figure 3. General CI process

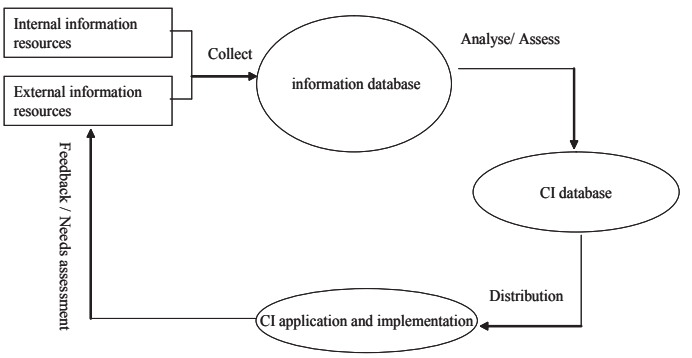
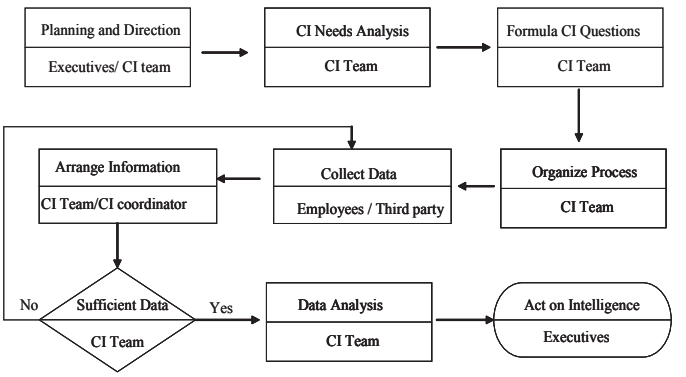


Figure 4. A specific sample of a CI research process



CI Process in Company X

Generally a CI process includes information collection, data arrangement, information analyses, intelligence application and implementation.

CI collecting process: The CI collecting processes in Company X includes two streams: general CI process and specific CI research project process. In the general CI processes (Figure 3), employees enter the information that they think valuable into CI information database every day. CI coordinators submit CI reports monthly after gathering the internal and external CI. The specific CI research projects (Figure 4) are often conducted when needs arise. They are usually derived from the CI needs for decision-making from CEO or CI teams. After formulating CI questions, the CI teams send a CI collection note to a CI coordinator and then to every engineer and salesman. The responsive information will then be collected.

CI analysis process: a CI team in each functional and non-functional group conducts CI analysis. People in the CI team have multi-CI analysis skills in the industry. They take charge of the CI analysis of specified competitors or customers.

CI distribution: After a professional analysis, the relevant CI reports are published in the company's intelligence database. Each report will be set a secret level for different level executives, managers or employees. The CI teams also send periodical electronic or printed CI reports to appropriate users through an internal delivery system. Executives, managers and employees can ask for help from the CI team to locate the intelligence or to conduct specific CI research.

CI application and implementation: The company uses CI to support decision making, to improve new products' development, marketing and sale, service, manufacturing and management, to position the company in the industry though comparing it with competitors, and to alarm and respond to competitors' actions, government policies and other changes in the competitive environment.

Cultivating CI Culture

To improve its CI capability, company X takes measures to cultivate a CI culture from both the institutional and educational perspectives. The institutional measures include:

1. Solidifying and constantly modifying its CI process and flow to satisfy development needs.
2. Setting up a systematic CI performance appraisal system. CI performance is taken as part of sale representatives and service centers' managerial performance (10%).
3. The functional departments also give feedback to CI teams to assure the CI teams improve CI quality continuously.
4. CI teams provide a CI template to coordinators and employees to standardize CI work.

The educational measures include:

1. Arranging CI training for the executives to strengthen their CI knowledge.
2. CI information gathering and analysis training.
3. CI legal and ethical training.
4. Anti-competitive intelligence training.
5. Cultivating a good CI sharing culture within departments, breaking sharing barriers between functional departments.

EXPERIENCE AND PROBLEMS OF THE CI SYSTEM

Key Features of CI Implementation of the Case Company

- Although Company X does not have a dedicated CI function team, it has a formal CI processes and a CI IT support system.
- Forming an excellent CI culture. Every employee is educated to contribute to the information collection and protect company's CI.
- Nominating CI coordinators in each department. These coordinators ensure that all valuable CI information can be collected and submitted to CI teams. At the same time, the CI information is analyzed and screened to avoid less valuable CI information being communicated. Furthermore, CI coordinators share quite a lot of CI service work and ensure CI teams spend more time on in-depth analysis.
- Regular collecting and defining CI projects are conducted, which helps acquiring comprehensive competitive information as well as conducting an in-depth analysis.
- Fostering a good CI utilizing environment. Besides electronic CI publication, CI teams edit periodical CI research reports and send them to directors, executives.
- Conducting periodical CI needs surveys.
- All CI works are based on CI needs and practices.
- Building a CI technological system systematically. Company X's CI technological system is constructed on Lotus Note system, which is not typical CI software. More employees can be involved in the CI system without having extra technological training.

Key Issues to Be Addressed

1. Company X's CI technological support system is not well constructed. First, the CI technological system is based on Lotus Notes system. The system is not a professional CI software system, which affects the efficiency of CI searching, sharing, and analysis. Second, the company has not set up a company level competitive database, which impedes CI sharing between different functional groups.
2. The company does not appoint a Chief Information Officer. This affects the quality of CI works and CI system building in the whole company although the CI in separated functional groups is successful.
3. Although the virtual CI team helps the CI works closely related to the workplace in the company. The lack of professional CI people would influence the effectiveness of CI.
4. System CI analysis tools are not used by CI teams to analyze information. Analysis results often depend on the CI team member's personal knowledge and skills, which might result in low quality of CI analysis.
5. Taking a short-term perspective in its leading CI system impedes the case company from building a systematic and professional CI system. In fact, it has influenced adversely the company's long-term strategy and earlier alarm system working properly.

CONCLUSION

This case study introduces a CI system that is aligned and integrated with Company X's organizational structure. We see that an integrated CI team plays a key role in building an efficient and effective CI organization. Organizations need to clarify what they need to construct an efficient CI system. The case also shows that the CI technological platform can be built up step by step. Any advanced CI technological tools need a systematic and institutional CI system to support. Due to the methodological limitations of the case study, the successful experience and lessons learned from this single case can only serve as an illustrative example of how a high-tech company implements a CI system.

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