USING THE BALANCED SCORECARD PROCESS FOR EVALUATING THE CONTRIBUTION OF A COMPETITIVE INTELLIGENCE EFFORT

by

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Approved by:

_________________________
Advisor
This paper develops a technique for evaluating the contribution of a competitive intelligence effort. A literature review of evaluation methods used within competitive intelligence is offered. The balanced scorecard process, used extensively in performance management, is selected and its applicability to the evaluation of a competitive intelligence department is tested through the use of a case study. The case study of the balanced scorecard demonstrates how it can investigate areas of weaknesses and make recommendations for improved performance. Recommendations from the case study on the use of the balanced scorecard performance method for other competitive intelligence departments are included.

**Headings:**

- Competitive Intelligence – Evaluation
- Environmental scanning – Evaluation
- Knowledge management
- Information systems -- Special subjects – Corporations
- Business literature – Evaluation
- Performance Management
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I. Introduction

A. The problem

“Not everything that can be counted counts, and not everything that counts can be counted.”

Albert Einstein, 1879-1955

Competitive intelligence departments have experienced difficulty in developing methods of measuring their impact within an organization. Part of the problem may be unrealistic expectations depicted in an article from the online news journal BusinessWeek (Case., 2001):

“For what amounts to a fairly modest investment, it is possible for a company to create a competitive-intelligence unit that gives its managers the one thing they need most in a downturn: a crystal ball (1-2).”

Other problems are expressed in the quote above from Einstein in that merely counting usage events may not accurately measure impact, and similarly some events that may have impact are hard to count.

Current literature concurs that information focused on an organization's competitors is necessary for success and decision-making. Environmental scanning and the subset of competitive intelligence is the gathering of information relevant to an organization's environment. Information may include events, competitors, industry news, and the like.
The purpose is to understand the environment in order for the organization to avoid surprises, identify threats and opportunities, and improve planning. Choo (2001, 1-8) suggests that effective environmental scanning is linked to improved organizational learning and performance. De Alwis and Higgins (2001, 17) indicate that the types of information considered very important for decision-making include competitor trends and regional economic trends.

Competitive intelligence appears worth doing within an organization but the problem remains of how to measure and evaluate the impact of a competitive intelligence department. For small competitive intelligence departments with a low initial investment, measurement may not be necessary. For larger departments it is not always clear which measures would be the most useful. Should the output of a competitive intelligence department be measured quantitatively or should the impact of competitive intelligence be the focus of measure?

Researchers within librarianship have been developing and testing outcome measures for some time. The intent is to go beyond user satisfaction levels and ascertain what difference the information provided makes to the organization. Marshall advises, “outcome studies require the researcher to identify the correct activities to monitor and create surveys that explore the impact of the activities” (2000, 28-30).

This paper explores outcome measures to identify useful ways to monitor the optimal impact of a competitive intelligence department. Advice from researchers on performance management suggests that activities should be aligned with the high level
objectives of the organization. Within a competitive intelligence department, which activities are best aligned with the high level objectives of the organization? A literature review illustrates the history of competitive intelligence evaluation and leads to the idea that the balanced scorecard process, used extensively in performance management, would be the correct evaluation tool.

B. Purposes of the study

- To investigate the feasibility of using the balanced scorecard to evaluate the performance and contribution of a competitive intelligence department.
- To devise, apply, and discuss via a competitive intelligence department case study, qualitative and quantitative metrics within the four perspectives identified in the balanced scorecard model.
- To discuss actionable recommendations for improvement.

The study will present a template for other competitive intelligence departments to follow in aligning their performance measurements with their respective corporations.
II. Investigation of the Literature

A. History of evaluation methods of competitive intelligence

The following is the result of a literature review on the published evaluation methods of competitive intelligence. A chronological organization is used to illustrate the progression of ideas.

Kahaner (1996, 232-233) references a 1993 Price Waterhouse Consulting (PWC) benchmarking study within the aerospace and defense industry. PWC’s goal was to investigate contract strategy, but during the study the researchers noticed inadvertently that the companies with a 67% win on the contracts they pursued, compared with an industry average of 18% included competitive intelligence in their contract strategy.

Jaworski & Chee Wee (1993) conducted empirical research based on managerial surveys. Their study is heavily cited and can be viewed as a starting point for evaluating competitive intelligence impact. Major findings include:

- Organizations that engage in high levels of competitive intelligence activity show 37% higher levels of product quality that is in turn associated with a 68% increase in business performance.
• Organizations that engage in high levels of competitive intelligence activity show 36% higher levels of strategic planning quality. High levels of confidence in strategic plans are associated with a 48% increase in business performance.

• Organizations that engage in high levels of competitive intelligence activity show 50% higher levels of market knowledge. Higher levels of market knowledge are associated with a 36% increase in business performance.

• The lack of formal, sanctioned competitive intelligence structure leads to less collecting, analysis, and use of competitive intelligence.

Eger (1995) introduces the concept of “cost avoidance” as a means to measure competitive intelligence effectiveness. Cost avoidance is a financial measure of the money competitive intelligence can save a company from spending money on the wrong product or by introducing a product at the wrong time. Kahaner (1996) reports a dramatic statement by Robert Flynn, the chairman and CEO of NutraSweet. Flynn places a value of “$50 million a year on competitive intelligence. The estimate is a combination of revenues gained in addition to those not lost” (229-231)

A leader and prominent speaker in the field of competitive intelligence, Jan Herring, produces a manuscript (1996) introduced the idea that effective evaluation of competitive intelligence must be a combination of quantitative and qualitative measures.

McGonagle & Vella (1999) reference a 1997 survey conducted by The Futures Group reporting the measures companies would most likely use to measure competitive intelligence output. The study found that, in order to measure the effectiveness of their
intelligence systems, respondents are most likely to use the following quantitative measures: (199-200)

- Actions taken – 67%
- Market share changes – 49%
- Financial goals met – 49%
- Leads generated – 48%
- New products developed – 44%

A 1998 study undertaken by the American Product and Quality Center focuses on 22 companies to evaluate what attributes of competitive intelligence were most valued by managers. Study resulted in a framework in which to demonstrate the best-practice competitive intelligence process. Even though the study identified a framework, Fleisher & Blenkhorn (2001) speculate that applying best practices to competitive intelligence is problematic due to the difficulty of measuring the economic benefits of competitive intelligence (54-57). Additionally the transfer of tacit knowledge is difficult to identify. Tacit knowledge tends to be the intuition and experience combination that leads to useful competitive intelligence analysis. Prescott, Herring, & Panfely (1998) speculate that in best-practice competitive intelligence companies this “tacit knowledge exists, but how it is passed on and used is not clear” (8-10).

Returning to the concept of combined quantitative and qualitative measures, Simon (1998) introduces the concept of hard and soft measures (1-8). Hard measures are scaled to the standardized performance of the organization's processes. These measures are objective and calculated by relatively standard practices. Examples are output, cost, time,
and quality. Soft measures tend to be more interpretative or subjective in nature. These measures are often determined by subjective interpretation and or feel, which make their validity and reliability less attractive than empirical hard measures. Examples include work habit, work climate, feelings and attitudes, and development advancement.

Hilmetz & Bridge (1999) publish research on the return on investment of competitive intelligence but put a high degree of responsibility on the decision maker to estimate the value of competitive intelligence information (4-11). They compare the financial return on investment of new product development with high certainty (competitive intelligence included) as opposed to low certainty (competitive intelligence excluded).

A benchmarking study from Lackman, Saban, & Lanasa (2000) finds that when a company emphasizes active participation among all personnel in gathering intelligence, the competitive intelligence function within that company was viewed as “more effective” by 40% of the management participants (3-6).

Arnett, Menon, & Wilcox (2000) publish empirical research conducted through survey questions indicating that “relationship factors” (involvement, communication, credibility, and trust) encourage people to view competitive intelligence as useful (8-12). Their results suggest that relationship factors affect the use of competitive intelligence, which, in turn, affects user’s decision-making abilities and their attitude toward competitive intelligence. However, Cook and Cook (2001) discovered after researching many competitive intelligence projects that typically no time was spent evaluating effectiveness by competitive intelligence users (28-31).
Prescott & Miller (2001) offer several typical quantitative and qualitative competitive intelligence measures (228-130).

- Quantitative
  - Number of alerts
  - Number of reports
  - Number of users

- Qualitative
  - Quality of intelligence product
  - Overall approval rating

The quantitative measures focus on input while the qualitative measures ask for post-output subjective quality assessments.

In their book *Managing Frontiers in Competitive Intelligence*, Fleisher & Blenkhorn (2001) offer suggestions for evaluating the effectiveness of the competitive intelligence function that have been successfully used in assessing competitive intelligence performance (114-119). Although their suggestions are not based on empirical research, the methods suggested are sound and inclusive:

- Audits
- Balanced scorecard approach
- Baldridge-mapping
- Benchmarking
- Management by objectives
- Quality related methods
Davison (2001) argues that it is necessary to classify competitive intelligence activities as either strategic or tactical in order to measure effectiveness (1-5). Evaluation of strategic competitive intelligence output would measure the proportion of accurate to inaccurate predictions of the future. Evaluation of tactical competitive intelligence output would include an estimate of the money saved by not doing something, or information about price changes or product efficiency. Davison concludes that a blend of both strategic and tactical approaches along with consumer satisfaction ratings will produce an effective method for competitive intelligence departments to demonstrate accountability for the work they produce.

**Summary**

Much of the literature on competitive intelligence consists of lists of sources (how to conduct competitive intelligence), or theoretical overviews (why conduct competitive intelligence). A few authors offer advice on how to start and manage a competitive intelligence effort. Overall, very few writings address performance evaluation methods beyond general suggestions. The availability of empirical research addressing competitive intelligence evaluation is scarce. This may be because competitive intelligence is highly situational. The chronological review above indicates the progression to a conclusion that a competitive intelligence evaluation method should blend quantitative and qualitative variables.
B. The Balanced Scorecard

The following section offers a supporting discussion for selecting the balanced scorecard as the best evaluation tool at the time for assessing the impact of a competitive intelligence department. Simon & Hern (2001) discuss the need to align the competitive intelligence function with the organization.

“If competitive intelligence is to be successful it needs to create a departmental vision, strategy, and guiding principles for its business conduct that align with the vision and strategy of the organization and competitive intelligence’s customers. The more the competitive intelligence department can be seen as supporting the aims of the organization, the more likely the success of the department (63).”

Historically business performance has been measured with financial indicators. In the 1980’s, as the business environment changed, dissatisfaction grew with the methods of cost accounting-based performance measurements. Olve, Roy & Wetter (1999,) specify the disadvantages as “centered on the lack of information for decision-making and the emphasis on short-term thinking since financial figures can only reflect past actions, discounting future trends”(14-15). New methods have been introduced that concentrate on the non-financial aspects of measuring business value. Recent efforts have strived to understand the intangible and intellectual assets of a company.

The concept of the balanced scorecard was introduced in 1992 by Harvard professor Robert Kaplan and consultant David Norton (1992). The balanced scorecard addresses the limitations of the traditional concentration on financial measurements. Kaplan and Norton stress, "what gets measured is what gets managed (71-79).” The idea is that a blend of performance measurements is critical to corporate success. The balanced
scorecard is a process for organizations to state their business strategy, align their business tactics to that strategy, identify performance measures, and track progress.

The balanced scorecard translates a company's mission and strategy by organizing its objectives and measures into four different perspectives. It uses these measurements to inform employees about current and future success. Kaplan and Norton state that the balanced scorecard assists senior executives by articulating the objectives of the organization and the variables supporting those objectives. Kaplan & Norton (2001) and Hoque & Hames (2000) offer many examples of the balanced scorecard approach being used by corporations as a vehicle to help organize corporate strategy effectively and as an approach to managing corporate performance.

The four areas of balanced scorecard focus are:

- The Financial Perspective is defined as the necessary financial perspectives for summarizing the economic consequences of actions already taken. Typical measures include return on investment, return growth percentage, and economic value-added.
- The Customer Perspective requires managers to identify the customer and market segments in which the business unit competes. It then measures the business unit's performance is then measured in these targeted segments. Typical measures include customer satisfaction, customer retention, new customer acquisition, customer profitability, maintaining a high reputation, and market share.
• The Internal Business Process Perspective focuses on the processes that will have the greatest impact on customer satisfaction and achieving an organization's financial objectives. The measures used are quality, response time, cost, on-time delivery, and new product introductions.

• The Learning and Growth Perspective identifies the infrastructure that the organization must build to create long-term growth and improvement. Investment in training and retraining of employees, enhancing information systems, and aligning organizational procedures and routines is measured through quality improvement rates, employee satisfaction, retention, training and skills.

On a very pragmatic level the balanced scorecard is an effective approach for reporting corporate performance measurement to people. Migliorato, Natan, & Norton (2000) summarize the balanced scorecard’s two key objectives: converting strategy into specific goals for different sections of the organization and communicating that strategy to all parts of the organization (45-50). Kaplan & Norton (1996) go further to say that the balanced scorecard performs best when integrated into all levels of the organization.

“Ideally each business unit will develop its own scorecard, using the overall corporate scorecard as a template. Strategy can then cascade to the entire organization. This creates organizational linkage from top to bottom (19).”

The competitive intelligence department and the balanced scorecard

From the chronological review of competitive intelligence evaluation we see growing evidence of a conclusion that a competitive intelligence evaluation method will blend quantitative and qualitative variables and will include a number of different measures
based on the four important perspectives for the business. Concurrently, arguments have been made for the need to align the competitive intelligence function with the strategy and vision of the organization. Given these needs, the balanced scorecard should prove to be an appropriate tool for competitive intelligence evaluation.
III. Applying the balanced scorecard to a competitive intelligence department in a privately held software company

We have argued that a competitive intelligence evaluation method would likely blend quantitative and qualitative measures and that the balanced scorecard is a viable tool for our purposes. Since the balanced scorecard requires a close examination of an organization or department from four different aspects, an effort to evaluate one department or case study may help to demonstrate its use. The ultimate goal of analysis is to yield insights that can be generalized to other competitive intelligence departments.

A. Case Study Background Information

The Competitive Intelligence (CI) department of a privately held software company XYZ is housed within the Market Intelligence department under the large umbrella division of Worldwide Marketing. The employees of XYZ enjoy an extensive “work life balance” philosophy that asserts the happier employees are in the work life balance, the more creative their work is and the more loyal they are. The philosophy appears to work XYZ has a 5% turnover rate in an industry where 20% is the norm. The competitive intelligence effort is well received amongst the senior management at XYZ who seem to understand the implications and potential benefits of competitive intelligence, especially in the highly competitive arena of information technology.
The CI department members have strong research, organizational, presentation, and interviewing skills. All have excellent writing and communication skills, and the ability to analyze information and to distill key points. All are university educated and most have been employees of XYZ for 10 years. The dress at XYZ is casual, but the CI department tends to be more business casual than weekend casual. All are well trained in and embrace a collaborative work style. They are helpful to one another and to people outside the department. They work well independently as well as within cross-divisional teams.

The primary promoter of competitive intelligence is the manager of the CI department. She tirelessly promotes, prototypes, and works to embed competitive intelligence within XYZ. The primary publicity for the CI department is the monthly Competitive Watch web cast. In this publicized and promoted event, a software solution is discussed and a competitive intelligence analyst presents an overview of the top competitors within that solution. A representative from field support follows with information on how to manage a sale in which that competitor has a presence.

Overall the following guidelines are observed:

- CI deliverables must be short, to the point, and responsive to sales needs.
- CI deliverables must be focused, not general. The CI department must make a decision on the most likely choice and defend it.
- CI deliverables must be timely.
The primary customers of the CI department are account executives (AE) who address issues with prospects in the context of competing for a sale. Current deliverables include:

- Profiles of competitive companies
- Profiles of competitive products
- Market maps
- Competitive briefs

Profiles are standardized to include the same information in the same place, complete with consistent logo, coloring and font. Financial vitals, market share, strengths and weaknesses are included along with strategic responses. These profiles from the CI department are recognizably different from other internal XYZ documents.

Information about competitors is derived from a number of sources. The competitive intelligence team compiles information about competitors from these primary and secondary resources to produce the deliverables.

- Market Intelligence Specialists globally
- Research Programs
- Analyst Relations
- Worldwide Marketing Strategists
- Business Development and Channel organization
- External sources such as analyst resources
- Relevant industry resources
- New XYZ employees with competitive knowledge from a former employer
• XYZ AEs

A Competitor Sighting application is available to all employees on the company intranet but is little used.

The top priority delivery channel for competitive intelligence is the XYZ intranet. A searchable database of competitive intelligence content is available on the XYZ intranet and is managed by the CI department directly. Email is also used to deliver intelligence directly in response to a request.

Since most of the delivery of competitive intelligence is virtual the servicescape is primarily the usability of the intranet. The web casts are done professionally; they usually last about 45 minutes and are archived for later viewing. The intranet is constantly being improved for ease of use and currency of content. The intranet is elaborate, and most employees have a small number of resources that they consult everyday, and ignore the numerous other options. As such, it is difficult to encourage employees to try a new resource.

Currently there is no attempt to attach a cost to competitive intelligence. The department has a budget, but it is not public knowledge. The cost for the research tools used by the CI department is shared across Market Intelligence and the XYZ Library. The CI department is relatively new at XYZ, but comparing what the XYZ CI department is doing to implement their program to the current literature indicates that they are following best practices.
B. Methodology

As previously stated applying the balanced scorecard method requires alignment with the high-level organizational goals and strategies. Senior management at company XYZ has clearly articulated and disseminated these goals. Within these organizational goals, an effort was made to gather usage and impact measures available to the competitive intelligence department. Special care was made to select measurements that could be collected over time in order to glean cause and effect relationships. The CI department of this case study is relatively new and some measurements will serve as benchmark metrics.

The CI department of this case study has initiated a series of surveys to help them stay in touch with their customers and their needs. The AEs are the targeted CI customers and respondents of the survey. The first survey occurred in July 2001; the second occurred in January 2002; and the third is proposed to take place in July 2002. All the surveys use the same internet-based questionnaire. Questions were designed to benchmark and then evaluate dimensions such as tangibles, reliability, responsiveness, assurance, and empathy. In July 2001, the AEs were invited to complete a survey via a website. Of 800 possible, 282 AEs submitted completed questionnaires for a response rate of 35%. In January 2002, the AEs were invited to complete a second survey via a website. Of 800 possible, 370 AEs submitted completed questionnaires for a response rate of 46%. Data from the two surveys is arranged into the appropriate balanced scorecard perspectives and compared.
C. Applying the Balanced Scorecard

The four perspectives of the balanced scorecard are examined within this section. The high-level organizational objectives from senior management of XYZ are stated along with how the CI department aligned its goals with the objectives. Within each perspective the appropriate portions of the surveys, results of a focus group, and diagrams are analyzed to determine what actions should be taken to reach the CI department’s objectives and hence contribute to the high-level organizational objectives. When available a measure of output and impact is documented.

1. The Financial Perspective

*High-level financial objective from senior management:* to increase new revenue by focusing on key business initiatives and enabling technologies.

The CI department aligned its goals with this high-level financial objective by devising a method of identifying the top competitors in each key business initiative and enabling technology. The survey questions used were:

- What competitors have you frequently encountered in sales situations?
- Which competitor have you most frequently lost to?

Compiling the results of these survey questions, cross checking the results with the identified key business initiatives and enabling technologies identified in the high level financial objective, and collaboration with the strategy department gave the CI
department a focused list of competitors. The CI department committed to producing competitive profiles on each of the competitors identified. As the competitive profiles were published they were posted to the company intranet in two formats: CI by company and CI by initiative.

*Measurable Objective for Financial Perspective 1:* The CI department aligned its goals with the high level financial objective by producing competitive profiles on each of the competitors in the key business initiatives and enabling technologies. To measure impact the CI department monitored web page hits on the competitive profiles.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Web page hits of competitive profiles on the competitors in the identified key business initiatives and enabling technologies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Objective</td>
<td>To provide the AEs with competitive profiles on the competitors in the identified key business initiatives and enabling technologies.</td>
</tr>
<tr>
<td>Measurement Definition</td>
<td><em>Web page hits</em> is defined as the number of times the competitive profiles were accessed by employees in a given period of time.</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>Quantitative. Integers.</td>
</tr>
<tr>
<td>Frequency of Update</td>
<td>Monthly</td>
</tr>
</tbody>
</table>
Results:

2. The Customer Perspective

*High-level customer objective from senior management:* Senior management wanted AEs to become recognized by the company’s customers as trusted advisors, they wanted them to be adaptable and responsive in providing products, services, and solutions.

The CI department aligned its goals with these high-level customer objectives by recognizing that by providing high quality intelligence to the AEs, the AEs are, in turn, better able to speak knowledgably with customers about competitors and their products. The ultimate payoff for an increase in the AEs knowledge of the competitors is hopefully an increase in sales. From the customer’s point of view, a more knowledgeable sales person about the competitor can potentially alert the customer if a competitor’s product will not fit their needs and potentially helps to build the image of trusted advisor.
The CI department organized a focus group of AEs to rate their satisfaction and use of the competitive profiles. The goal was to determine if changes in the competitive profiles were necessary in order for the AEs to better create the trusted advisor image.

**Measurable Objective for Customer Perspective 1:** The CI department aligned its goals with the high level customer objective by forming a focus group to discover what intelligence needs are necessary to assist the AEs in building the trusted advisor image in the customers’ perception. The results of the focus group are being processed at this time. The CI department’s intent is to incorporate the results of the focus group into changes on the competitive profiles. To measure impact the CI department will survey the AEs. The AEs will be asked to rate the new competitive profiles on a scale of 1 to 5. A rating of 1 would indicate that the changes in the competitive profiles were unimportant for the AEs to build the trusted advisor image, progressing to a rating of 5 indicating that the changes in the competitive profiles were very important for the AE to build the trusted advisor image.

<table>
<thead>
<tr>
<th>Measure</th>
<th>AE rating of the competitive profiles (with results of the focus group incorporated) as helpful to foster the desired trusted advisor image within the customers’ perception.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Objective</td>
<td>To provide competitive profiles for the AE to foster the desired trusted advisor image.</td>
</tr>
<tr>
<td>Measurement Definition</td>
<td>AE rating on a scale of 1-5, 1=unimportant to 5=very important in the contribution of trusted advisor image.</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>Qualitative. Integers.</td>
</tr>
<tr>
<td>Frequency of Update</td>
<td>Annual</td>
</tr>
</tbody>
</table>
Results: Unavailable at time of study.

Secondly the CI department felt the need to better understand what competitive challenges the AE faced when the customer base was viewed by vertical industry. The staff sought to determine what the company’s competitive environment was within specific industries and where it was stronger than others, and where less so. Was it more of a challenge to build the trusted advisor image with customers from some industries compared to others? The first step was to discover what industries the AEs frequently encountered competitors. The survey question used was:

In which industries do you most frequently encounter competitors?

*Measurable Objective for Customer Perspective 2:* The CI department aligned its goals with the high level customer objective by deciding to identify what vertical industries are most characterized by competition. The suspicion is that the more competitive the industry, the more difficult it is for the AEs to build the trusted advisor image within the customers’ perception. This challenging situation may provide an opportunity for the CI department to provide intelligence targeted at competitors within industries characterized with high competition. The intermediate step is to identify what vertical industries are most characterized by competition.
Measure: AE assessment of industries that are most competitor intense.

Strategic Objective: To identify what vertical industries are most characterized by competition.

Measurement Definition: Vertical industries are most characterized by competition.

Unit of Measure: Qualitative. Integers.

Frequency of Update: Biannual

Results:

<table>
<thead>
<tr>
<th>Vertical Industries most Characterized by Competition</th>
<th>January 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td></td>
</tr>
<tr>
<td>Tele-communications</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Pharma</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td></td>
</tr>
</tbody>
</table>

Follow up action would be to measure web page hits of CI profiles targeted at the finance, telecommunications, and manufacturing industries and incorporate the results with the AE rating of the competitive profiles (with results of the focus group incorporated) as helpful to foster the desired trusted advisor image within the customers’ perception.
3. The Internal Business Process Perspective

High-level internal business process objective from senior management: Senior management seeks to improve the support provided to customer-facing employees. An objective is that internal business processes empower customer-facing employees in the areas of communication, connectivity, accessibility and productivity.

Business process improvements may range from moderate to wide-scale. It can involve the elimination of paperwork and/or steps in processes, as well as the introduction of automation and improved technology. McGee and Prusak (1993) state that information represents data that are organized, prioritized, and put in a context. Data can be endless, while information must be contained. For data to become useful as information, it must be presented in an actionable manner. McGee and Prusak add:

“The key to competitiveness is the ability to acquire, manipulate, interpret, and use information. Information is an advantage, and it requires management. Unlike other assets though, information is reusable. It does not deteriorate or depreciate, and it has a value that is determined solely by its users (38-40).”

The CI department aligned its goals with this high-level internal business process objective by recognizing the importance of supporting the AEs (customer-facing employees) by providing information in a context. The goal became to provide the AEs with efficient access (fewest steps, simplest interface) to actionable competitive intelligence. The first step was to discover the sources AEs currently used. The survey questions used were:

What competitive intelligence information sources do you (AEs) use most?
Which competitive intelligence information source do you (AEs) find most useful?

What new competitive intelligence materials would you (AEs) find most helpful?

**Measurable Objective for Internal Business Process Perspective 1:** The CI department aligned its goals with the high level internal business process objective by seeking to improve competitor information management practices. The CI department seeks to improve their internal business processes that empower customer-facing employees in the areas of accessibility and productivity. The first step is to learn what resources the AEs are currently choosing for their CI needs. Not only does this give the CI department a benchmark with which to measure their own performance, it also provides clues about the AEs preferred intelligence interface, level of granularity, and habits. These clues will serve as useful guidance for the CI department to fashion their deliverables in order to increase the AEs accessibility and productivity.

<table>
<thead>
<tr>
<th>Measure</th>
<th>AEs choice of most helpful sources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Objective</td>
<td>Improvement of competitor information management internal processes in support of AEs.</td>
</tr>
<tr>
<td>Measurement Definition</td>
<td>Competitive information sources perceived as most used and most useful.</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>Quantitative. Rank of sources deemed most used and most useful.</td>
</tr>
<tr>
<td>Frequency of Update</td>
<td>Biannual</td>
</tr>
</tbody>
</table>
Results:

<table>
<thead>
<tr>
<th>CI Resources January 2002</th>
<th>0 5 10 15 20 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intranet</td>
<td></td>
</tr>
<tr>
<td>CI Dept</td>
<td></td>
</tr>
<tr>
<td>Analyst reports</td>
<td></td>
</tr>
<tr>
<td>Customer</td>
<td></td>
</tr>
<tr>
<td>Competitor website</td>
<td></td>
</tr>
<tr>
<td>Industry Publications</td>
<td></td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
</tr>
</tbody>
</table>

Measurable Objective for Internal Business Process Perspective 2: The CI department aligned its goals with the high level internal business process objective by seeking to improve competitor information management practices. The CI department seeks to improve their internal business processes that empower customer-facing employees in the areas of accessibility and productivity. Internal Business Process Perspective 2 measures the quantity of competitive profiles produced by the CI department. Understanding that the larger the collection of competitive profiles the more apt the AEs are to find a useful report makes Internal Business Process Perspective 2 an important output measure.
Measure | Quantity of competitive intelligence reports produced annually.
---|---
Strategic Objective | Improvement of competitor information management practices.
Measurement Definition | Number of competitive intelligence reports produced by month.
Unit of Measure | Quantitative. Integers.
Frequency of Update | Monthly.

Results:

![Bar chart showing quantity of CI deliverables by month, 2001](chart.png)

Additionally the CI department makes efforts to align its goals with the high-level internal business process objective by formalizing its service role.

*Measurable Objective for Internal Business Process Perspective 3:* The CI department aligned its goals with the high level internal business process objective by seeking to improve competitor information management practices. The CI department seeks to improve their internal business processes that empower customer-facing employees in the
areas of accessibility and productivity. The following service blueprint seeks to describe to the CI staff and senior management the CI department’s internal processes of supporting the AEs and offers a visualization of the delivery of CI profiles. The diagram should help the CI department improve their internal processes of supporting the AEs by distinguishing the difference between what services should be and what services are.

The desired services are described best using circles, as the CI process is ongoing and iterative. Included are two circles of visibility or onstage activities, illustrating that the AE holds two roles within the service. The AE is both a consumer of the CI end product and a supplier of the CI raw product. The interior of the two circles reflects the onstage activities where the staff and the products from the CI department are visible to the AE.

The exterior of the circles reflects the backstage activities where staff work to make products available but those steps are not visible or apparent to the user. The points of contact between the CI department and the AE are noted on the circles of visibility by stars. The line of internal support processes shows where other departments of the organization provide support services and is located at the bottom of the page.
Service Blueprint of the CI Process for AEs

**Planning and Direction.** Identify effective promotion techniques.

**User interface and storage**

**Design, promotion and collection**

**Dissemination**

**Analysis and production**

**Intelligence collection and reporting**

**Receive CI from intranet**

**Seek CI on intranet**

**Promo for feedback system**

**Rate usefulness**

**ONSTAGE (Providing CI)**

**ONSTAGE (Seeking CI)**

**User interface, information processing and storage**

**Making the intelligence actionable and understandable.**

**Identify key competitors.**

**Explain usage**

**Intellectual production and disseminaton**

**CREATE KNOWLEDGE BASE**

**Backstage**

**Hardware support**

**Research and Development**

**Software Support**

**Library**

**Analyst Relations**

**Strategy**
4. The Learning and Growth Perspective

*High-level learning and growth objective from senior management:* Senior management seeks to improve the company’s knowledge management practices. Amar (2002) defines knowledge management as the systematic process of finding, selecting, organizing, distilling and presenting information in a way that improves an employee's comprehension in a specific area of interest (87-91).

The CI department can foster learning and growth within the company by improving knowledge management in the specific area of competitors. Profiles on competitors increase the internal knowledge of the AEs and senior management. The CI department engages in document management, collaborative communication systems, and fosters communities of interest within the organization. Research from Pole, Madsen, & Dishman (2000) proposes that propagation of competitive intelligence throughout an enterprise increases organizational learning, which, in turn, facilitates organizational change (4-7).

*Measurable Objective for Learning and Growth Perspective 1:* The CI department aligned its goals with this high-level learning and growth objective by focusing on how satisfied the AEs are with the content of the competitive intelligence materials. Higher satisfaction with content should increase the amount of time in reading this material and thus foster organizational learning and growth. The survey question used was:

How satisfied are you with the competitive intelligence materials?
Measure | AE satisfaction with CI material.
--- | ---
Strategic Objective | Improvement of satisfaction with competitive intelligence materials leading to increased use and knowledge.
Measurement Definition | Number of AEs somewhat or very satisfied.
Unit of Measure | Quantitative. Percentage of respondents.
Frequency of Update | Biannual

Results:

![Satisfaction Rating January 2002](image)

The CI department intends to further align its goals with the high level objective of improving knowledge management practices by encouraging AEs to share their knowledge of the competitors.

*Measurable Objective for Learning and Growth Perspective 2:* The CI department aligned its goals with this high-level learning and growth objective by focusing on how to encourage a collaborative learning organization. Since competitors are the CI department’s specific area of knowledge management interest, they wished to facilitate a
forum in which the AEs can share their knowledge of the competitors with the CI department. A Competitor Sighting system was written and made available early in 2001. Learning and Growth Perspective 2 serves as a measure of use of the competitor sighting system.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Use of Competitor Sighting system.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective</strong></td>
<td>Improve sharing of knowledge of competitors across the organization.</td>
</tr>
<tr>
<td><strong>Measurement Definition</strong></td>
<td>Percentage of AEs using the Competitor Sighting system per month.</td>
</tr>
<tr>
<td><strong>Unit of Measure</strong></td>
<td>Quantitative. Integers.</td>
</tr>
<tr>
<td><strong>Frequency of Update</strong></td>
<td>Monthly.</td>
</tr>
</tbody>
</table>

Results:

![Percentage of AEs using the Competitor Sighting System](image-url)
IV. The Balanced Scorecard, Recommendations, and Summary

A. The Balanced Scorecard

Applying these various measures to the CI department for XYZ Company and making a summary judgment in each measure yields the following profile for the CI department as of January 2002:

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial perspective</td>
<td>Steady progress</td>
</tr>
<tr>
<td>Customer perspective 1</td>
<td>New measure, results currently unavailable</td>
</tr>
<tr>
<td>Customer perspective 2</td>
<td>New measure, results currently unavailable</td>
</tr>
<tr>
<td>Internal business process perspective 1</td>
<td>Needs improvement</td>
</tr>
<tr>
<td>Internal business process perspective 2</td>
<td>Steady progress</td>
</tr>
<tr>
<td>Internal business process perspective 3</td>
<td>Steady progress</td>
</tr>
<tr>
<td>Learning and growth perspective 1</td>
<td>Needs improvement</td>
</tr>
<tr>
<td>Learning and growth perspective 2</td>
<td>Needs improvement</td>
</tr>
</tbody>
</table>

Financial perspective. Web page hits on CI profiles are a reliable measure of usage. The deliverables are aligned with the high level objectives because they are focused on the competitors within the initiatives and technologies targeted by senior management. The results show that usage of the CI department’s products is steadily climbing. Follow up
suggestions include a qualitative measure of how useful the AEs perceive the profiles, combined with a quantitative measure of AEs sales ratios.

_Customer perspective 1._ AE’s are asked in focus groups to assess the appropriateness of CI profiles in fostering the desired trusted advisor image. Results are unavailable at this time but should serve as guidance for alignment with the high level customer objective.

_Customer perspective 2._ Measure of the industries that are characterized by high competition is a useful indicator of future CI profiles needed. Almost 50% of the AEs report experiencing high competition in three industries: finance, telecommunications, and manufacturing. Final measurement would evaluate usage of CI profiles targeted at competitors within these three industries.

_Internal business process perspective 1._ The objective is to improve competitor information management practices. A measure expressing how much AEs rely on the CI department for competitor information is compared to potential other resources. Currently there is only a moderate reliance on the CI department by the AEs.

_Internal business process perspective 2._ Improving competitor information management practices can also be measured by the quantity of CI profiles produced annually. The results for the XYZ Company show steady improvement.

Internal Business Process Perspective 3 – A third way to measure the improvement of competitor information management practices involves assessing how the CI
department's services appear to the AEs. Developing a service blueprint to illustrate the competitive intelligence department’s internal processes of supporting AEs offers a visual representation for stakeholders to see the relationship between the CI department and the AEs.

*Learning and growth perspective 1.* To determine whether the department is contributing to knowledge management objectives an assessment of the satisfaction level of materials produced by the CI department is undertaken. Results indicate that 51% of consumers are somewhat to completely satisfied.

*Learning and Growth Perspective 2.* A second measure for the CI department’s contribution to the knowledge management objectives involves determining the degree of sharing of knowledge of competitors across the organization. Results indicate that less than 5% of the AEs share their knowledge of competitors with the CI department.

**B. CI department plans based on results of first balanced scorecard assessment**

**Depending on CI publications**

Addressing that currently AEs report little dependency on the CI department’s publications for their CI needs. This summary statement is derived from the low score on Internal business process perspective 1 and the low score on Learning and Growth Perspective 2.
The CI departments can provide better intelligence by creating a closer relationship with the company sales force. In order to increase loyalty, the CI departments must increase the level of satisfaction and sustain that level of satisfaction over time. To raise satisfaction, value must be added to the content of the competitive intelligence offered. Adding value leaves the sales force feeling that they got more out of the relationship than they paid in. This loyalty leads to repeat exchange of information, referrals to others, and builds a dependency on the CI department.

The CI department can offer a searchable database of CI competitor profiles including SWOT (strength, weakness, opportunity, and threat) analysis, market maps, web casts, and relevant analysts reports. A promotion campaign of the database will be necessary. Usually dissemination is less a problem than education. Negative images such as, “feeding information into a black hole” are hard to overcome and require patience. Kotler (2001) suggests that concrete examples of how the benefits of participation outweigh the costs are needed to offset the negative images (271-274).

Within the case study, AEs were asked what specific CI needs they have. Focusing on this CI content wish list will help to add value to CI content and increase dependency on a CI department. The question asked was, “What CI do you need to better compete?” Answers included:

- Market maps
- Competitors product prices
- Competitors selling strategies
• Product SWOT analysis
• Market perception of a competitor vs. fact
• A weekly single source update of competitor news
• A CI database
• A CI list serve that fed into the CI database mentioned above

Sharing competitive information

Addressing that currently the AEs share little information about the competitors back to the CI department. This summary statement is derived from the low score on Learning and Growth Perspective 2.

A CI department can provide better intelligence by creating a close relationship with the company sales force. Building financial and social bonds will facilitate developing a cooperative relationship. Within this context the sales force is the CI department’s customer.

A perceived high customer delivered value would be the ideal financial bond between the two departments. Kotler (2001) identifies the net difference between customer value and customer cost is the customer delivered value. Focusing on the “what’s in it for me?” response will help to build a relationship in which the sales force will acknowledge it takes some time to feed information back to the CI department, but what they receive in return is worth the effort, i.e. a perceived high customer delivered value (Close, 2001). The total customer value for CI is timely and accurate information about a competitor, gathered from reputable sources, synthesized, and delivered in a usable format that enables the sales force to engage with prospects in an informed and knowledgeable
fashion. The total customer cost in this case is twofold. First, the CI database must be easy to navigate and produce useful results quickly. Second, the method the CI department requests information back from the sales force (either new information to be incorporated into future intelligence, or a critique of intelligence currently available) must also be easy to provide and efficient.

Gaining access to the sales force during established training classes may be the least expensive promotion channel. In order to address the “what’s in it for me” concern, the CI department might consider small informal meetings in which to share a well-written case study. Since many sales people tend to be talkers rather than readers, face-to-face interaction could prove more successful and provide an opportunity for discussion. The content of the case study would highlight a sales win in which a senior sales person successfully used a CI database. Since becoming a senior sales person implies success, the result would be an influential testimonial stimulating junior sales persons to participate (Kotler, 2001). Hoping to build the case for the advantages of participating in the CI effort, the session would end with instructions on how to access the CI database.

CI departments can use relationship marketing through customization to provide varied and customized services to the sales force. A recent survey (Sachs, 2001) shows that 36% of web surfers would visit a content site more often if it featured a layout that would be customized.

Unique opportunities when utilizing an electronic medium of service delivery is the technique of push and pull technology (Skyrme, 1999). When a sales person accesses the
CI database, another method of customization could be to utilize an alert system, an intangible benefit of participating with the CI department. The sales person would indicate what competitors, market space, and vertical markets are of interest. When new CI publications are available relevant to a user’s interests, the information is automatically pushed to their email accounts. In contrast, upon entering the CI database, the information relevant to that sales person could be available as a pull, accessing information when it is needed. Subsequently, every time the sales person visits the database, he/she is given a personalized experience.

Social bonding between the sales force and a CI department is accomplished by professional courtesy. Emails and phone calls deserve a prompt response. Professional courtesy and evidence that feedback is listened to is the beginning of building social bonds. Positive response to a particular intelligence delivery should be interpreted as a desire to have more like this. Feedback should be listened to and evaluated. Via survey, the CI department can establish indicators of relationship strength (closeness, likelihood to continue, and likelihood to refer colleagues), sales force satisfaction, and sales force perception of value created by a CI department. By using roughly the same approach each time, a weighted composite index of the overall strength of the relationship can be created. This index would allow a CI department to track its performance over time and improve its relationship with the sales force where needed (Barnes, 2001). Ultimately the desired relationship will have many dimensions, including trust, reliability, responsiveness, communication, respect, affection, understanding, and other characteristics that one would associate with any kind of relationship, whether interpersonal or otherwise (Barnes, 2001).
Communication should flow two ways. A CI department can provide information to the sales force, but the sales force should provide information back. By designing an electronic feedback form, a CI department can create a well-defined procedure to receive a value rating on the services they provide. This give and take can create a sense of community; a sharing of ideas on topics that are of interest to all participating. By creating involvement, the user experiences interaction with the CI department and the social bond will strengthen.

**Generalizations from XYZ Company’s CI department to all CI departments**

The CI department of company XYZ is similar to other CI departments in that the primary customer is the sales force. Another similarity with many other CI departments is that the sales force is a key primary resource of competitive information to the CI department. The CI department at XYZ is like many other CI departments in that it is relatively new and is working to build new networks, relationships, and alliances with other groups.

The balanced scorecard method identifies a low score in the area of sales force dependency on the CI department’s publications and a low score in the quantity of information about the competitors the sales force provides to the CI department. It is believed this discovery indicates a weak link for many CI departments. This paper recommends customer relationship management as an approach for CI departments to build a relationship with the sales force of their company.
Caufield (2001) defines customer relationship management (CRM) as the skills necessary to customize to your specific business need and apply with insight, judgment and precision initiatives that pay-off by changing, or taking advantage of, customer behavior and how these differ by segment (17-22). Shaw (1999) defines CRM as the balance between corporate investments and the satisfaction of customer need to generate the maximum profit (23-27).

CI departments need to find the balance between maximizing the satisfaction of the sales force and minimizing the investment necessary by the corporation in order to produce high quality competitive intelligence. The kinds of activities that might build stronger relationships with the primary customer for CI departments using CRM principles include:

- Develop an easy to use feedback system.
- Insure high value CI content by identifying the type of information the sales force is currently gathering for themselves.
- Develop customized layout features of the CI database, complete with push, pull, and alert technology.
- Write a case study of a CI based sales win and host small groups to disseminate.
- Initiate a new CI deliverable focusing on tangible benefits (wins) of CI.
- Prepare presentations to deliver at sales training on the benefits of CI.
- Continue to monitor satisfaction via survey and publicize the results.
- Work toward continuous education of the intangible benefits of CI and the ongoing nature of CI.
C. Summary

The purpose of this study was to investigate the feasibility of using the balanced scorecard to evaluate the performance and contribution of a competitive intelligence department. Applying the balanced scorecard to the evaluation of a CI department is an appropriate tool given its blend of quantitative and qualitative measurements. The balanced scorecard allows a CI department to align its objectives and activities with the high-level objectives of the organization. The resulting balanced scorecard uses five quantitative measurements, three qualitative measurements, and spans the four perspectives of the balanced scorecard. This study presents a template for other competitive intelligence departments to follow in aligning their performance measurements with their respective corporations.

The resulting balanced scorecard lead to a discovery of a weak link between CI departments and their primary customer the sales force. This weak link is characterized by a low dependency to which a sales force relies on a CI department for competitive information and a low level of willingness of a sales force to provide competitive information back to a CI department. In order to address these issues this paper proposes that CI departments use customer relationship management skills to build a relationship with the sales force of their company. Finally, eight activities are recommended to CI departments that might build stronger relationships with the sales force.

Further research is necessary to extend the robustness of the balanced scorecard as an evaluation tool for competitive intelligence departments. Research indicates that
departmental objectives that are in alignment with company objectives are well received by senior management. A study exploring this idea for a competitive intelligence department would be advantageous in the argument of the balanced scorecard as the correct tool for evaluation of a CI department.
V. Bibliography


