

## **Knowledge Capital and Information Hospital Trustees Need\***

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### **Abstract**

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*The purpose of this qualitative, descriptive case study research was to explore the adequacy and utility of knowledge capital (KC) information supplied to nonprofit hospital trustees for strategic decision-making. Interviews with 14 New York area hospital trustees were content analyzed, with seven themes emerging. Five case studies were developed in the form of trustee archetypes: expert advisor, operational skeptic, inquisitor, neophyte, and representative. Results confirmed previous research among corporate CEOs and nonprofit hospital management regarding the supply of detailed, relevant and updated information on nonfinancial, intangible items and resources for better trustee decision-making and hospital performance. Ten practice recommendations are made regarding the preparation of relevant and timely briefing materials that respond to trustee rankings of importance.*

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**Keywords:** Knowledge capital, Governance of hospitals, Trustees, Resource-based View (RBV), Dynamic Capabilities Approach (DCA), Archetype

### **Introduction**

**Knowledge Capital and Information Hospital Trustees Need** was a study to determine the information trustees need to be better strategic decision makers, and to identify and develop knowledge capital assets for competitive advantage. Further, the study identified 5 trustee *archetypes* based on their information-seeking and using behavior, and recommended ways in which board chairs could enhance the information-gathering and supply of information to hospital trustees.

### **Background/ Need for Research**

Knowledge capital (KC), an aggregation of intangible assets and resources such as human capital (including intellectual capital), structural capital (processes and systems in an organization), and relational capital (relationships with clients, and strategic partners), is widely known to be a major portion of an organization's value. However, ways of measuring KC are not generally agreed upon.

Furthermore, despite several studies among CEOs of America's largest corporations overwhelmingly indicating their desire to measure, manage, and monitor KC (95 percent said their companies *should*), only about five percent of these same corporations actually *do*.

Research among non-profits regarding information supplied to the board prior to regular meetings is nearly nonexistent. Some research into New York hospitals (Kovner, 2001) explored the amount of information supplied, and a few studies explored KC-related key performance indicators (KPIs) used in Texas and European hospitals (Love, Revere, and Black, 2008; Zigan, MacFarlane, and Desombre, 2007).

**Knowledge Capital and Information Hospital Trustees Need** sought to fill research gaps, and to explore, in a practical manner, ways in which hospital boards could use KC, recognized as a major factor in performance, organizational value, and competitive advantage, for better board decision making.

### Research Questions

Six research questions were asked in the study:

1. To what extent are hospital board trustees (CEOs, and trustees) aware of KC concepts and terminology?
2. How is KC, and its components and indicators, (e.g., medical education audits) discussed by, or reported to, the board, if at all?
3. Which KC components are or would be most important to trustees, and why are they important?
4. Are there examples of KC components that made a difference or benefit in this organization or another with which trustees have been associated?
5. What is the value information related to KC would add to the information (e.g., cash flow, admissions, average length of stay) currently supplied to trustees at board meetings?
6. If the board on a frequent and regular basis monitored KC, how should senior management present information about KC for optimal understanding and use?

### Study Population and Methodology

My study used a qualitative descriptive case study design, and was directed to the nonprofit hospital board decision maker in the New York metropolitan geographic area. Fourteen semi-structured 30-minute interviews with trustees at 7 different hospital yielded information on trustee awareness and perceptions of KC, as well as its importance in the context of strategic decision making.

### Why Knowledge Capital is Important to Hospital Boards

In recent years, knowledge as a source of competitive advantage has gained recognition, as seen through the lens of the resource-based view of the organization, or RBV (Siebart, 2005). In opposition to Porter's five forces theory (i.e., that organizational leaders respond to threats from without by developing assets that overcome the threats), KC can be seen as a dynamic internal capability, built up over years, and reflected in organizational culture, branding, and reputation (Teece, 2004). Rather than being depleted, as is money capital, KC is a renewable, appreciating, and eminently combinable asset (Teece, 2004). The homegrown characteristic of KC is an advantage in differentiating an organization's products or services, as well as creating a high cost of entry for other organizations seeking to compete.

Proponents of RBV use indicators other than those traditionally considered outputs of nonprofit hospitals (e.g., surgical services, medical education (McGuinness & Morgan, 2000). Teece (2004) encouraged executives to emphasize competencies and capabilities rather than products, an approach, which is aligned with the mission orientation of a nonprofit hospital. Cavusgil, Seggie, and Talay (2007) cited Toyota's lean principles as a competitive advantage, built upon capabilities developed, honed, and put into practice by the company.

Nonprofit hospitals depend on the governance provided by well-informed and dedicated board trustees. The board trustees lend their strategic planning expertise, contacts with other organizations, and expertise on a number of important matters to senior management, as well as to others in the hospital and community. Information provided by management supplies the board with the tools it needs to make decisions and allocate resources. Every day, the world is increasingly knowledge- or information-based, and the value of corporations and other organizations is less evident from a balance sheet listing financial assets alone. Measurement of the intangibles, or KC, of a nonprofit hospital must be conducted to compute the true value of the organization and to plan strategically for its future. This was the primary focus of the present study.

### Findings

Two areas of the study yielded findings that were significant in the filling of gaps in the research: rankings of KC and financial key performance indicators, and the overarching importance of KC/nonfinancial information when an acquisition of a medical practice was concerned. In the first instance (KC v. financial KPIs), the research found that trustees ranked half of the 10 top-ranked indicators to be KC, or nonfinancial, in nature: reduction of hospital-originated infections (#1), retention of nursing staff (#2), nurses with a BS degree (#3), patient satisfaction (#6), and # of physicians listed in "NY's Best Doctors" (#10).

### Trustee Archetypes Identified

From these interviews, practice recommendations were made, and five trustee archetypes were developed: *expert adviser*, *operational skeptic*, *inquisitor*, *neophyte*, and *representative*.

The Wyckoff study explored the way trustees used the information supplied to them in preparation for each board meeting. Individual trustee strategies are evident as a series of information-gathering and processing habits.

For example, a theme that emerged from the interviews highlighted participants’ access to additional information through inquiry at board meetings, follow up with other trustees and administrators, and relationships with hospital department heads. For those who used such inquiry as their dominant strategy, an *archetype*, the *operational skeptic*, was developed. A similar case study narrative approach was used to identify and develop the four other archetypes.

Practice Recommendations

Ten practice recommendations were made in the study, including: streamlining board information and archiving historical information; inclusion of additional nonfinancial, or knowledge capital reports and metrics in board material; developing new, graphic formats for KC information; allowing more time for trustees to review pre-meeting information; presentations on transactions (e.g., acquisitions) could contain nonfinancial, knowledge capital information and metrics; encourage more follow up or contact with experts in different areas of the hospital; more detailed orientation for new board members; and gradually introduce and discuss KC indicators and comparative statistics to develop a board perception of hospital progress within a context of competitive advantage.

Further Research Recommendations

Recommendations for future research were made in the study: add the study’s insights into the importance and competitive advantage of knowledge capital to board recruiting strategies; conduct similar research amongst a larger sample of hospital trustees (e.g., Q=100); and develop role-playing exercises to further develop or refine the trustee archetypes identified in the study.

About the researcher James Wyckoff, DHA, APR, is an educator and award-winning marketing communications practitioner. He is a recent visiting assistant professor of public relations at SUNY Oswego. He has worked at public relations and advertising agencies, and on the client side with colleges (College of Mount Saint Vincent), hospitals (Hospital for Special Surgery and New York Presbyterian) and home care companies. (Olsten Health Services, formerly the nation’s largest). He has written speeches for two US Presidents, won an Effie award, and was co-author of the PRSA Code of Ethics and Professional Standards.

Wyckoff has been published in the peer-judged journal *Drug Benefit Trends*, on CIGNA’s groundbreaking pediatric asthma disease management program, and is the author of a chapter on “Health Communication Ethics” in the second edition of the Bartlett & Jones textbook, *Health Communication*.

Tables and Exhibits

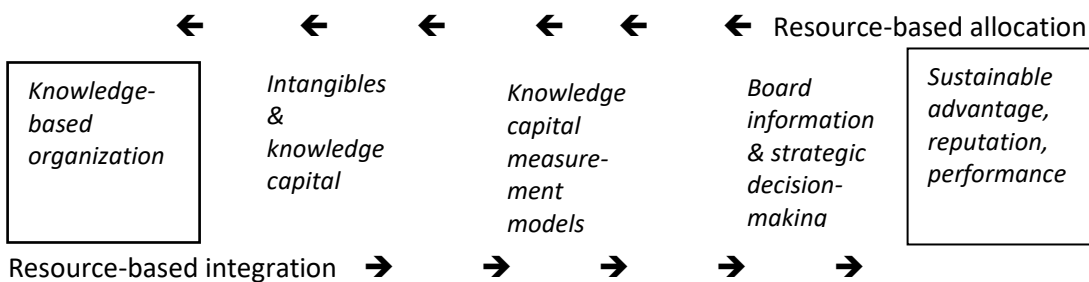


Figure 1. The flow of resources in a knowledge-based organization is a strategic process toward competitive advantage and optimal performance.

- Included in an assessment of performance drivers:
- information about hospital operations, environment, organization structure and strategies for growth;
  - reporting and metrics from areas such as Nursing, Environmental Services, Case Management, and Risk Reduction;
  - statistics from recent discharges such as length of stay (LOS), admit and discharge time, coding, payment denials, and discharge delays.
- In addition to reviewing the above information, the assessment should include:conducting interviews with key executives and operations staff;
- observing discharges in patient care areas and patient flow processes in the hospital;
  - reviewing available automated systems and how they are used for documentation and to generate performance reports.

Figure 3. Items and areas included in a knowledge capital audit by the board. From “Trustee Workbook 4: Asset Stewardship and the Board’s Tools (for Understanding and Improving Operational Efficiency,” by A. Kirby, M. Totten, and J. Orlikoff, 2007, Trustee, November-December. Reprinted from Trustee, by permission, November/December 2007, Copyright 2007, by Health Forum, Inc. (see Appendix B).

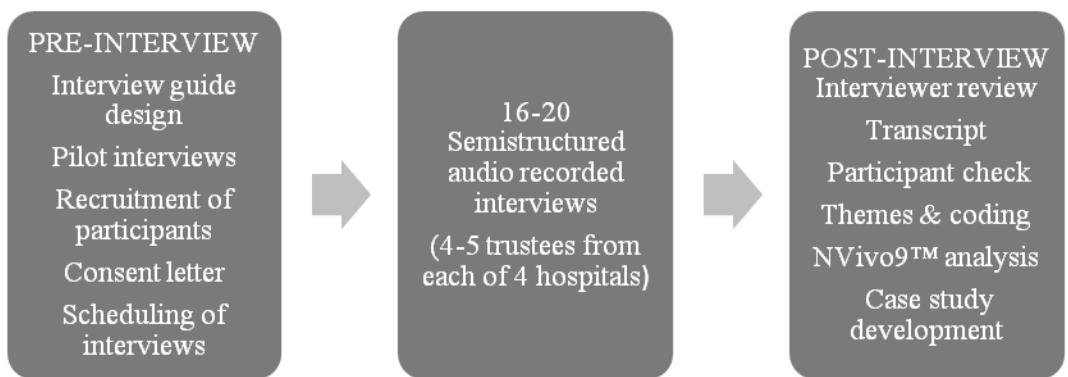


Figure 4. Flow chart of present study

<u>TOPICS</u>	=>	<u>THEMES</u>	=>	<u>ARCHETYPES</u>
One-to-one correspondence		Most prevalent concept(s)		Characteristics
<i>Type of information (e.g. STB)</i>		<i>Agenda, cte. reports (STB)</i>		<i>Areas of expertise</i>
Key: Example of topic/theme/archetypal characteristic in italics; STB: Subtopic/Theme B				

Figure 5. Flow chart of data analysis.

Table 5

Results of Paired Comparisons Questions: Which Would Generally Be More Important to You (Matter the Most) as a Trustee? Number of Responses in Parentheses

Performance indicator (# chosen)	Performance indicator (# chosen)
a Reduction in hospital-originated infections (12)	OR Outpatient surgical revenues? (2) OR % of hospital inpatient occupancy (12) OR No. of physicians listed in “NY’s Best Doctors”? (2)
b % of hospital inpatient occupancy (4)	OR Hospital revenues? (8)
c Outpatient surgical revenues (6)	OR Increase/decrease in FTEs (full-time employees)? (5)
d % of nurses with a BS degree (8)	OR Hospital admissions vs. a year ago? (6)
e Days cash on hand (3)	OR % Patient satisfaction? (11)
f Reduction in hospital-originated infections (10)	OR % Patient satisfaction? (4)
g % of hospital inpatient occupancy (4)	OR % Patient satisfaction? (7)
h % of nurses with a BS degree (11)	OR Increase/decrease in FTEs? (3)
i Hospital admissions vs. a year ago (9)	OR No. of physicians listed in “NY’s Best Doctors”? (2)
j Retention of nursing staff (11)	OR Days cash on hand (4)?
k Emergency room admissions (5)	OR % Patient satisfaction? (8)

Table 8

Relative Rankings of the Nonfinancial and Financial Performance Indicators

Rank	Performance indicator in paired comparisons	Score (based on no. of mentions ÷ item frequency)
1	<i>Reduction in hospital-originated infections</i>	11.0
2	<i>Retention of nursing staff</i>	10.5
3	<i>Nurses with a BS degree</i>	9.5
4	Hospital revenues	8.1
5	Admissions	7.5
6	<i>Patient satisfaction</i>	7.0
7	% inpatient occupancy	6.6
8	Outpatient surgical revenues	4.0
9	Days cash on hand	3.5
10	<i># of physicians listed in “NY’s Best Doctors”</i>	2.0

KC items in italics.

Interview Guide

INTERVIEW GUIDE Hospital trustees and knowledge capital

Introduction

Study code:
Interview date:

Hello, my name is James Wyckoff. I am a doctoral student conducting research for my dissertation. You have been selected for this interview because you are a trustee of \_\_\_\_\_ Hospital.

I will be asking a number of questions predetermined as necessary for this research. You may elaborate in your answers and provide examples from your experience and that of the hospital’s board. Your answers and examples will be confidential, so I ask that you speak freely.

Background on trustee:

How long have you served on the board of \_\_\_\_\_ Hospital?

Are you employed by the hospital? Y N

If employed, what is your title/function?

What, if any, board committees do you sit on?

Do you receive a stipend from the hospital?

Of what does that consist?

Do you serve on other boards? Y N What type of organization(s)?

Main questions	Follow-up questions	Notes
What information do you receive prior to each board meeting, in preparation for the meeting?		
Do you have time to review this information? How much of it is what might be called <i>new</i> information, at least new to you? How much of this information has to do with <i>financial</i> reports, results, and measurements?		
What proportion of the information is financial? Nonfinancial? Is the ratio of financial and nonfinancial changing? In what way?		
Would you say the <i>amount</i> of information you receive is about right, too much, or too little for you to perform your work as a trustee? Do you seek out your own information between board meetings to supplement or verify the information received by the board chair and management? What kind, and how much, and from whom?		
<b>Paired comparisons</b> Example: All other things being equal, when you are assessing the performance of your hospital, which of the following metrics are more important? Reduction in hospital-originated infections OR revenues? (use Likert-type scale)?		
<b>Scenarios</b> Example: The chairman of the board of your hospital proposes that the hospital acquire a group of clinics serving a certain segment of the community. The material circulated prior to the board meeting did not contain information on this proposal. As a trustee, what would you do? What information do you need to know in order to weigh in on this discuss		
Some information valuable to governing a hospital is <i>non-financial</i> , or what some might call <i>intangibles</i> , or <i>knowledge capital</i> . For instance, information on the continuing education of the nursing staff, the number of journal articles published by the medical staff, patient satisfaction scores, and the like. How is this so-called <i>knowledge capital</i> reported to you and the rest of the board?		

<p>Is this kind of information aggregated or reported as an indicator of progress (e.g., less, more, or the same amount as a year ago) by hospital management?</p>		
<p>Do you or other members of your board query those who present non-financial information as to how it might represent or contribute to competitive advantages or better performance of the hospital?</p>		
<p><b>Presentation of KC information</b>                  If one were to ask you for the best way to present you with information of a <i>non-financial</i> nature (e.g., the hospital’s efforts to reduce post-surgical infections or trends toward upgrading the hospital’s technology) what form would such reporting take? For example, numerical tables and charts, personal presentations by accountable managers/administrators, or some type of graphic reporting tool/dashboard?</p>		

**PAIRED COMPARISONS SECTION**

- Reduction in hospital-originated infections  OR Outpatient surgical revenues  ?
- % of hospital inpatient occupancy  OR # of physicians listed in “NY’s Best Doctors”  ?
- % of hospital inpatient occupancy  OR Hospital revenues  ? N/A
- Outpatient surgical revenues  OR Increase/decrease in FTEs (full-time employees)  ?
- % of nurses with a BS degree  OR Hospital admissions vs. a year ago  ?
- Days cash on hand  OR % Patient satisfaction  ? N/A
- Reduction in hospital-originated infections  OR % Patient satisfaction  ?
- % of hospital inpatient occupancy  OR % Patient satisfaction  ? N/A
- % of nurses with a BS degree  OR Increase/decrease in FTEs (full-time employees)  ?
- Hospital admissions vs. a year ago  OR # of physicians listed in “NY’s Best Doctors”  ?
- Retention of nursing staff  OR Days cash on hand  ?
- Emergency room admissions  OR % Patient satisfaction  ?

**References**

Cavusgil, E., Seggie, S., & Talay, M. (2007). Dynamic capabilities view: Foundations and research agenda. *Journal of Marketing Theory and Practice*, Volume 15, Issue 2, 159-166. doi:10.2753/MTP1069-6679150205

Kirby, A., Totten, M. & Orlikoff, J.. (2007). *Trustee*, November-December.

Kovner, A. (2001). Better information for the board. *Journal of Healthcare Management*, 46, 53-67.

Love, D., Revere, L., & Black, K. (2008). A current look at the key performance measures considered critical by health care leaders. *Journal of Healthcare Finance*, 34(3), 19-33.

McGuinness, T., & Morgan, R. (2000). Strategy, dynamic capabilities and complex science: Management rhetoric vs. reality. *Strategic Change*, 9, 209-220. doi:10.1002/1099-1697(200006/07)9:4<209::AID-JSC485>3.0.CO;2-G

Siebart, P. (2005). Corporate governance of nonprofit organizations: Cooperation and control. *International Journal of Public Administration*, 28, 857-867.

Teece, D. (2004). Knowledge and competence as strategic assets. In *Handbook on knowledge management 1: Knowledge matters. Reprinted from California Management Review*, 40(3), 129-152.

Zigan, McFarlane, and Desombre . (2007). Intangible resources as performance drivers in European hospitals. *Journal of Productivity and Performance Management*, 57, 57-71.