



Organizational Value of Knowledge Management

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ABSTRACT

One of the barriers to understanding the value of knowledge management is the lack of a ready methodology to be used to assess the effect of implementation of knowledge management on the organization. Corporations around the world have identified a need for KM; however, they have not identified suitable methods to effectively measure the benefits of capturing and sharing knowledge. In an effort to measure the value of KM, organizations should adopt a methodology or framework that can demonstrate the efficacy of their implementations. This paper discusses KM and organizational assessment, illustrating a methodology to assist in the clarification of the impact of KM for managers.

INTRODUCTION

Knowledge Management offers organizations a powerful means for capturing, organizing and disseminating their collective expertise. The success of KM is dependent upon fundamental changes occurring in the way organizations and their employees do business. "Successful Knowledge Management begins with hard decisions about what knowledge is worth managing" (Rossett & Marshall, 1999).

"Since managers are interested in capturing relevant knowledge about the key processes of their firms, it is now apparent that this should be part of the strategic goals of the company" (Snyder, Wilson, & McManus, 2000). While many organizations are discussing the value of KM systems, few have determined the best methodology to measure this perceived value. Until managers can be shown incontrovertible evidence that their KM implementations are effective and can positively impact the bottom-line, there will be resistance to wider KM efforts. This likely means that KM will be relegated to the "management fad" category. Part of the problem centers around the choice of an appropriate methodology for assessment.

KNOWLEDGEMANAGEMENT

Knowledge Management has been defined as "...the process of capturing a company's collective expertise," (Fearnley, P. & Horder, M. 1997, p. 46). The aim of KM is to create learning organizations that provide equal access to corporate memory. "The purpose of knowledge management is to enhance organizational performance. Knowledge Management is typically made operational through a series of new projects, (such as British Petroleum's virtual teamwork program using video conferencing to share human expertise between remote sites), 13 processes (such as creating research teams to visit customer sites), and activities (such as interviewing potential customers)." (DeLong, 2000, pg. 115). If we wish to enhance organizational performance, we should believe that it is obligatory to measure the impact of KM projects.

Organizational Assessment

A value proposition states how KM can help the organization achieve its goals better, faster, or cheaper. Bill Pieroni, general manager for Armonk, NY-based IBM's Global Insurance Industry states, "The measurement for value is the most important thing. A knowledge

management strategy based off of a fact-based business case that shows it will create value for the organization is vital," (MacSweeney, 2002, p. 44)

Knowledge Management initiatives can be slow, costly and difficult. Successful KM projects require upper-level management support as well as a significant investment in technology, experienced personnel and time. Returns, if any, are often slow to come and intangible in nature. In determining the best methodology for assessing the value of KM, managers must consider measurable process improvement, cost savings, business enablement, and risk reduction. We focus on measures of process performance as the best place to demonstrate the efficacy of KM.

"A knowledge project should focus on a specific business problem that can be quantified, in terms of what the problem costs the company," according to Peter Novins, vice president, Cap Gemini Ernst & Young (New York), (MacSweeney, 2002, p. 43). "Value is often associated with some form of measurement. Today we have slowly learned to value immeasurable things like knowledge but to value even more intangible things like tacit knowledge is even today unusual" (Haldin-Herrgard, 2000, p. 362).

Development of Knowledge Management Measures

To measure intellectual asset management, KM must be defined in terms of business objectives. Once KM goals are defined, organizations can determine which of the intellectual assets are worth harvesting, organizing, managing and sharing. It is important for organizations to realize that the business relies heavily on data that should be converted to information and used to increase the knowledge of the recipients. Therefore, the realization of KM as a strategic force in the company is very potent. "Organizational culture is increasingly recognized as a major barrier to leveraging intellectual assets. Knowledge ultimately assumes value when it affects decision making and is translated into action", (DeLong, 2000, p. 126).

Many companies have the perception that they can install a KM system and immediately generate value. Although KM can produce outstanding gains, it must be managed as a core business process. Organizations are dynamic rather than static constructs (van Iterson, 2000). Knowledge management needs to cope with knowledge created (intellectual assets) as staff learn or invent new concepts, as well as with knowledge lost which, over time, could create intellectual liabilities (Caddy, 2000).

Although many companies appear to be developing KM systems, they frequently lack clear objectives. Therefore, with no specific objective, firms find it very difficult to measure the benefits of KM within the organization. There is clearly a need for the development of a methodology or framework to measure KM benefits.

Constraint on Adoption/Proliferation

One of the primary issues of KM measurement is the attitude of management that "one size fits all." There have been numerous at-

tempts at quantitatively measuring knowledge capital; however, intangible knowledge within the organization is very difficult to measure. Although organizations view knowledge as one of their most important assets, it is typically recorded as an expense (Grayson, 1996).

Some firms attempt to measure KM by estimating the value of the tangible assets, such as software, trained employees, etc. It is not uncommon for firms to attempt to measure their KM performance with traditional financial methods, such as economic value added, total cost of ownership, balanced scorecard, etc. Until organizations determine an effective way to measure their intangible KM benefits, they will continue to have constraints that will prevent the adoption/proliferation of the KM process.

If we take the perspectives stated by Grover & Davenport (2001), a logical starting point is assessing organizational impact of computing technologies in business: the point at which work gets done. We contend that this is the place that KM can be assessed best—the performance of critical organizational processes. It is far more useful to harvest actionable knowledge from top performers and place the knowledge in electronic performance support systems (EPSS). This is an ideal way to supply knowledge about process performance to anyone in the organization. Several firms, such as Buckman Laboratories use their corporate intranets to distribute the EPSS to all locations around the globe.

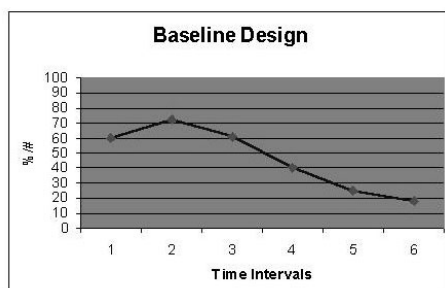
Methodology

Measuring knowledge is vital to organizations. Performance measurement provides the organization with a “device through which to focus and enunciate accountability” (Sharman, 1993) and “an objective, impersonal basis for performance evaluation” (Sloma, 1980).

Management must realize that measuring KM value is a top-down issue; otherwise, the true impact to the firm will not be realized or understood. In order to design an effective measurement system, we contend that a process orientation should be taken from the beginning to find concrete measures. Managers of critical company processes typically have well-established measures of those processes and monitor them on a periodic basis. Employing well-known pre-measurement and post-measurement organizational behavior techniques would follow this process.

A well established pre-measurement baseline, intervention, post-measurement methodology in organizational behavioral research employs the use of baseline data and contrasting results of the post intervention data (Komaki, 1977). One powerful advantage of this method is the fact that visual examination of the data, when stable baselines are obtained and the effects of the intervention are immediate and marked, obviates the requirement for further statistical analysis (Hersen & Barlow, 1976). Baer (1977) stated that visual analysis is the superior analysis in “real life” settings. Clearly, the implementation of KM should fit in this “real-life” category. If KM has immediate and sufficiently marked impact on the process assessment measures, it should make the case for proliferation of KM to other areas of the organization. As shown below in Figure 1, charting of the baseline data and the subsequent, post-implementation data provides documentation of the efficacy of the KM implementation.

The firm must develop an instrument that measures what it purports to measure to confirm validity. The proposed method should be able to meet validity criteria. The last step of this methodological



approach will include the interpretation of the measurements and their results, i.e., KM value. Therefore, by focusing on critical processes, using legitimate baseline and post-measures, the organization’s managers can visually verify that the KM implementations had both process specific as well as organizational impacts.

Suggested Scenarios

It is possible to quantify, qualify and prioritize the ways KM contributes to the bottom line. We suggest that the persons responsible for KM, select key processes for demonstrating the effects. If this has been done, the expert’s advice should be made available to the performers on a just-in-time basis, as required. When the knowledge is made available to performers, we can state that the implementation/intervention has been made.

CONCLUSION

The bottom line: Investment in Knowledge Management creates business value.

Corporations around the world have identified the need for KM; however, they have not identified the appropriate method to measure the benefits of KM. Successful KM programs can demonstrate clearly defined links to bottom-line business benefits. It is imperative that managers establish a substantive method to measure the value or benefit.

By adopting a logical, repeatable framework – a valuation methodology, firms can identify and nurture their KM investment. For the assessment, we suggest using baseline, and post-implementation measures of established parameters surrounding the process, charted to provide easy visual interpretation. If KM can be shown to positively impact performance of key organizational processes, it should make broader applications feasible, even if they may involve less tangible measures. If managers are convinced that KM pays off on key process performance, they should perceive the value of organization-wide KM efforts. The ultimate goal is to draw a direct line between KM investments and the firm’s competitive advantage.

REFERENCES

- Baer, D.M. (1977). Perhaps it would be better not to know everything, *Journal of Applied Behavioral Analysis*, 10, pp. 167-72.
- Caddy, I. (2000). “Intellectual assets and liabilities”, *Journal of Intellectual Capital*, 2(1), pp. 129-146.
- Fearnley, P. And Horder, M. (1997). What is Knowledge Management? Knowledge Management in the Oil & Gas Industry. *London Conference Proceedings Notes*.
- Grayson, C. J. (1996). “Taking inventory of your knowledge management skills”, *Continuous Journey*, Winter, pp. 367-372.
- Grover, V. & Davenport, T.H. (2001). General perspectives on knowledge management: Fostering a research agenda, *Journal of Management Information Systems*, 18 (1), pp. 5-21.
- Haldin-Herrgard, T. (2000). Difficulties in diffusion of tacit knowledge in organizations, *Journal of Intellectual Capital*, 1 (4), pp. 357-365.
- Hersen, M. & Barlow, D.H. (1976). Single-case experimental designs: Strategies for studying behavioral change. New York: Pergamon.
- Komaki, J (1977). Alternative evaluation strategies in work settings: Reversal and multiple-baseline designs, *Journal of Organizational Behavior Management*, 1, pp.53-77.
- MacSweeney, G. (2002). “The knowledge management payback,” *Insurance & Technology*, 27 (7), pp. 41-44.
- Sharman, P. (1993). “The role of measurement in activity-based management,” *CMA Magazine (Canada)*, September, pp. 25-29.
- Sloma, R. S. (1980). How to Measure Managerial Performance, Macmillan Publishing Co. Inc./Collier Macmillan Publishers.
- Snyder, C. A., Wilson, L.T., & McManus, D.J. (2000). Corporate memory management: A knowledge management process model, *International Journal of Technology Management*, Spring.
- van Iterson, A. (2000). “Organizational doom and resurrection.” *Organization Studies*, 21, pp. 95-102.

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