

Information Behavior Realities in Organizations

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This short paper provides discussion on the influencing effect of information behavior in organizations, as well as the forces which influence information behavior itself. The research goal is to offer insight on the nature of information behavior in organizations. To do so, the authors present findings from their quantitative analysis of a Web-based survey administered in one particular information knowledge and information intensive firm. Results point to: i) the stronger role information behavior plays over information management processes and policies in affecting organizational information use outcomes; ii) the influencing effect of the information environment on organizational information behaviors; and iii) the influencing effect of both the information environment and organizational information behaviors on personal information behavior.

Web Survey Instrument

Theory used to design the survey instrument was drawn from the information sciences and knowledge management literatures (for more details, see Choo et al., *in-press*; Detlor et al., 2006). The 42-item questionnaire contained three main sections on information management, information behavior, and information use outcomes. In the first section (information management), 14 questions were developed from theory as

well as from items used in recent surveys on information and knowledge management conducted by the OECD in 2002 and Statistics Canada in 2001. These questions asked about the information use environment at the general level of the organization, and touched on areas such as information policy, formal procedures, training, and mentoring. In the second section (information behavior), 28 questions were adapted from items used by Marchand et al. (2001) in their survey on information orientation. Thus, there were items covering information integrity, formality, control, transparency, sharing, and proactiveness. The third section (information use outcomes) contained questions derived from the literature which polled participants' task-related outcomes where information is used to solve problems or innovate.

Case Study Site

The chosen study site was one of Canada's largest national law firms. The organization employs over 2000 professionals and recently went through a number of acquisitions and mergers to create a national firm capable of offering a diverse portfolio of offerings. In order to manage the information and knowledge of a varied and geographically dispersed group of professionals, the firm had introduced a firm-wide knowledge management strategy to encourage professionals to help better share their knowledge and information and to collaborate together more effectively. Four hundred and five employees of the firm from across the country took part in the survey (a 20% response rate). Most of the respondents were professional staff (23%), support staff (23%), and administrative staff (21%). There were more female respondents (58%), and most answered the bilingual survey in English (92%).

Data Analysis

Two rounds of quantitative analysis were employed. The first was a factor analysis of the questionnaire items to determine factors within the information management, information behavior, and information use domains, followed by a correlation and regression analysis to assess the strength of the relationships between significant factors found within each of these three domains. The second was a structural equation modeling analysis exploring the effects of an organization's information environment on both organizational and personal information behaviors.

In terms of the factor analysis, the results showed that several factors had eigenvalues greater than 1.0. Two information management factors accounted for 57.8% of the common variance: *Information Management - Explicit* and *Information Management -*

Tacit. Five factors postulated by the Information Orientation study (Marchand et al, 2001) were found among the items and collectively accounted for 60% of the common variance: *Integrity, Transparency, Sharing, Proactiveness, and Informality*. One factor which accounted for 45.1% of the common variance was found to express *Information Use Outcomes*. The correlation analysis conducted on these factors showed that *Information Use* was significantly correlated with each of the five information behavior factors. All correlations were in the expected direction (positive), with *Sharing* and *Proactiveness* showing moderately strong correlations with *Information Use*. *Information Management - Explicit* and *Information Management - Tacit* were both positively but weakly correlated with *Information Use Outcomes*. In terms of the multiple regression of *Information Use* on the five information behavior factors, results showed that the standardized regression coefficients of *Sharing, Transparency, Proactiveness, and Informality* were significant at $p < 0.5$. However, the multiple regression of *Information Use Outcomes* on the two information management factors were not statistically significant. These results suggest that, at least for this organization, information behavior trumps information management in its impact on information use outcomes.

With respect to the structural equation modeling analysis that was performed, a structural model was postulated based on a review of the literature on organizational information environments and information behavior (Choo et al. , 2000; Detlor, 2003, 2004; Katzer & Fletcher, 1992; Rosenbaum, 1996; Taylor, 1991). The structural model contained three latent constructs (an organization's information use environment, organizational information behavior, and personal information behavior) and suggested the following three hypotheses.

- H1: An organization's information use environment impacts organizational information behaviors.
- H2: An organization's information use environment impacts personal information behaviors.
- H3: Organizational information behaviors impact personal information behaviors.

Eleven questions from the larger 42-item questionnaire were used to assess the theoretical constructs found in the structural model. An examination of the measurement model showed that items loaded successfully onto their respective latent constructs above the expected threshold value of 0.7. There was both high convergent validity and discriminant validity in that there were high correlation of items on their respective latent construct but low correlations between items representing different constructs. Construct

reliability was assessed using Cronbach's alphas; all values exceeded the commonly used threshold of 0.7. Measures of internal and convergent consistency of all constructs were greater than the accepted values of 0.7 and 0.5 respectively (Fornell & Larcker, 1981).

Figure 1 below shows a simplified view of the structural model absent of five demographic moderator variables (sex, job category, their interaction, age, and years spent in the organization). The figure shows reasonable path coefficients and a strong R^2

value suggesting that the study's three hypotheses can be supported with high degrees of confidence. Of interest, the structural model shows that 17% of the variance in organizational information behavior is accounted by the organizational information environment and that 19% of the variance in personal information behavior is accounted for both by the organizational information environment and organizational information behaviors. Effect sizes of both the organizational information environment and organizational information behaviors were calculated to examine their predictive power on personal information behaviors; these worked out to 0.022 and 0.031 respectively. These low to medium effect sizes suggest that neither of these as single constructs contribute significantly to the predictive power of the model. Rather it is the combined effect of both the organizational information environment and organizational information behavior that explains almost 20% of the variance in personal information behavior. Future research may want to investigate more constructs which better explain personal information behaviors in organizations.

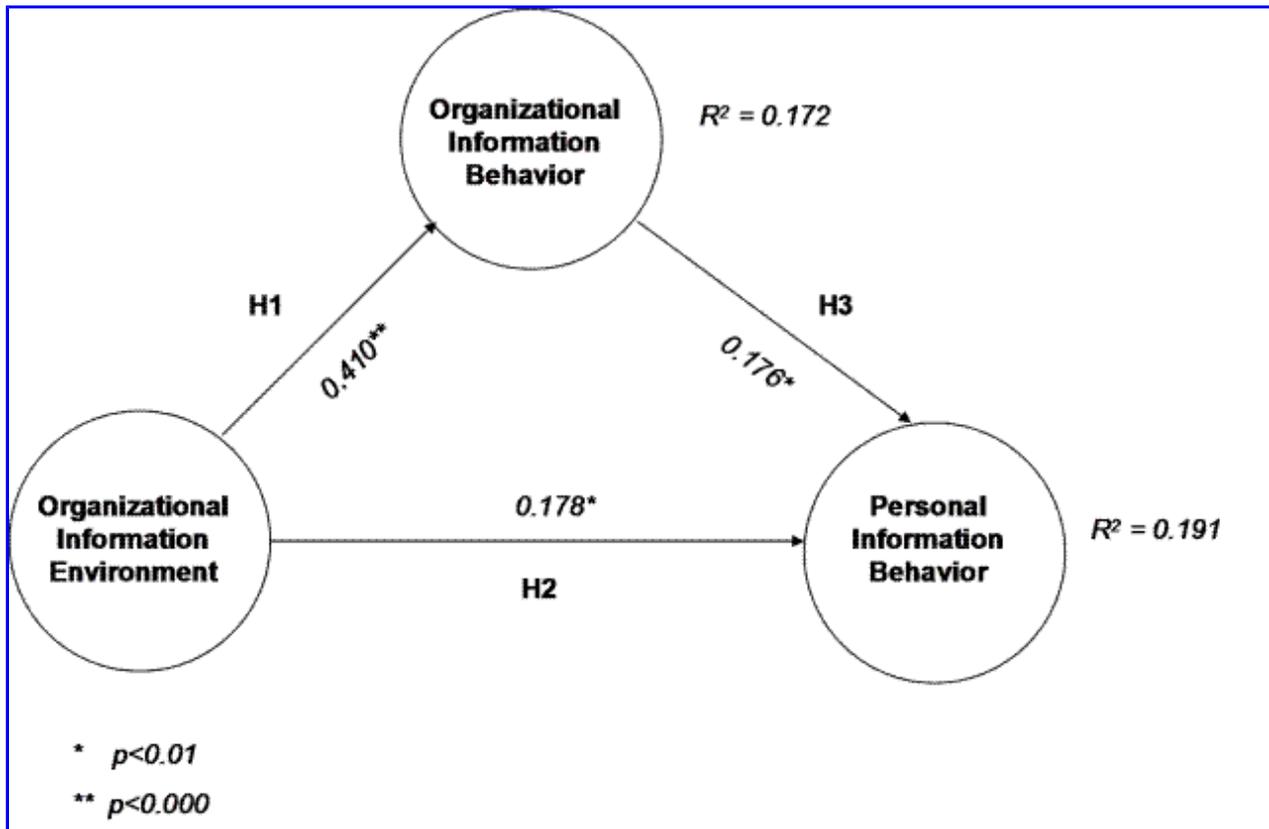


Figure 1: The study's structural model

Conclusions

Together, the above research illustrates the conflicting realities of information behavior in organizations today. On the one hand, our first round of analysis suggests that information behavior may be more of an influential force than an organization's information management processes and policies. On the other, our second round of analysis suggests that information behaviors are to some extent shaped by an organization's information environment, which in part comprises an organization's information management style and habits.

This bi-directional influence may best describe the complex and intricate nature of organizational information behavior, yielding evidence for more research on the phenomena of information behavior realities in organizations.

Qualitative analysis on the open-ended questions from the survey is underway and results will be disseminated in the poster session at ASIS&T.

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