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The Impact of Mindlessness-Mindfulness on Information Processing

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Motivation for this Research

In terms of organizational design, an important factor in the reduction of worker uncertainty is their information intensity (Weick, 1969). Daft and Macintosh (1981) showed that individuals who have access to many and varied information sources perceive that their work environment, in terms of the nature of the information processed and the tasks performed, to be less uncertain. Thus through information processing, congruent frameworks among workers are developed which then affect the organization's interpretation of equivocal events (Weick, 1993). Farzad and Evans (1993) found that individual cognition is an important predictor of convergence in terms of congruent frameworks which then set the stage for organizational action.

Managers when asked about their information processing activities will in most cases retrospectively describe them as rational activities used to reduce their uncertainty and equivocality in decision areas (Weick, 1969). This ex post facto spin of information processing as a rational activity in many cases belies the complexity of managerial information processing.

Mindlessness versus Mindfulness in Information Processing

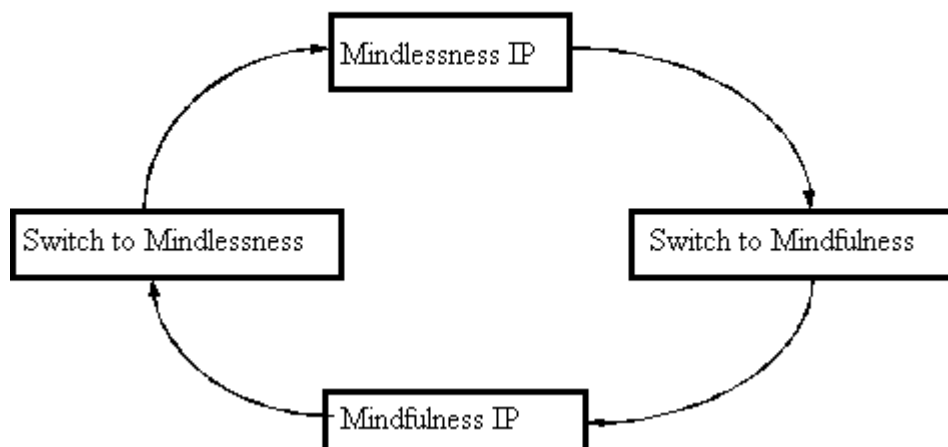
Langer (1989, p. 138), states that, ".. in spite of our increased awareness of limited information processing, people in general still are far more mindless than psychologists have assumed." Langer indicates that mindlessness is not just minimal information processing (amount) but is a qualitative indicator of the conscious consideration given to information processing. In the mindful mode, Langer (1989) indicates that the person processing information is creating distinctions in the information processed and creating new categories while in the mindlessness state of reduced attention the person will rely on past rules and categories in processing information.

A person could be a mindless information processor in some areas and mindful in other areas. Chanowitz and Langer (1981); Langer and Imber (1979) showed that information initially processed in a mindless way does not always come up for reconsideration even in circumstances where it should be reassessed. Langer (1989) believes that neither the

mindless nor mindful states require effort but it is the switching from one state to the other that requires effort.

People are more mindful when the outcome is personally relevant (McAllister, Mitchell, and Beach, 1979) or if people expect to have to justify their decisions (Janis and Mann, 1977). However Janis (1972) showed how group think can take over where a group used mindless processing in making important decisions. Langer (1989) indicates that mindless behavior is enacted with conscious attention to only a few cues that represent a situation.

Figure 1 **Switching from Mindlessness to Mindfulness**



Louis and Sutton (1991, p. 56) state, "an individual or group needs to be adept at (1) functioning in an automatic cognitive mode, (2) sensing when reliance on habits of mind or automatic processing is inappropriate, (3) switching from automatic to conscious cognitive processing, (4) functioning in a conscious cognitive mode, (5) sensing when active thinking is no longer necessary, and (6) switching from conscious to automatic cognitive mode." As Langer (1989) indicates, the real information processing energy is exerted when the switch of cognitive states occurs. Daft and Macintosh (1980) explain that important information processing activities are uncertainty and equivocality reduction. The implication is that the mindfulness involves purposeful switching from automatic to a conscious, mindful state to reduce the uncertainty and unequivocal in the information processing situation faced by the individual and conversely for mindlessness situations (Figure 1). However, in familiar situations the individual may be lulled into processing the information unconsciously in a mindless state. This may be due to the channel through which the information is presented or through past experiences with the information source or information content. The effective information processor will be able to switch cognitive gears to match the information processing needs of the situation no matter how frequently that situation has occurred in the past.

This perspective on information processing presents a dilemma for the providers of information systems. The very nature of GUI platforms leads to unconscious information processing behaviors in their usage, i.e. the mindless point and click behavior when using a mouse and a GUI to obtain information. Likewise familiar information channels such as voice mail, facsimile, and email that can lead to information overload and may result in mindless information processing that can mask some of the richness inherent in the information transmitted. Thus the dilemma for the information system provider is to develop information systems that provide information easily yet do not cause the recipient to process the information in a mindless mode. Needed are cues within the technologies to stimulate the information recipient to meet the information received with the appropriate information behavior - mindfulness versus mindlessness.

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