

Chapter 4

Communication Framework to Empower 21st Century Engineers and IT Professionals

Ambigapathy Pandian

Universiti Sains Malaysia, Malaysia

Shaik Abdul Malik Mohamed Ismail

Universiti Sains Malaysia, Malaysia

Ahmad Sofwan Nathan Abdullah

Universiti Sains Malaysia, Malaysia

ABSTRACT

The role of communication has been emphasised ever since Dewey (1929; 1958) refreshingly eulogised the role and impact of communication in social discourse. Analysis of contemporary research outcomes and current literature clearly indicate that communication skills top the priority list with regard to workplace needs that will spur organizational advancement both financially and qualitatively. This chapter focuses on dissecting the workplace needs of engineers and IT professionals with specific emphasis on current and future communicational demands in the Malaysian engineering sector. It also highlights the non-linear nature of communication, which is essentially bidirectional or multidirectional in orientation. The chapter then elucidates its key findings within the Malaysian context as well as proposes a new curriculum design framework for the generation of contemporary syllabuses that meets the dynamic demands of workplace communication. It concludes with suggestions on how engineering and IT professionals as well as purveyors of communication skills syllabuses need to be sensitised on the importance of communication skills in the post-Fordian economic paradigm.

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INTRODUCTION

Contemporary workplace communication is the distillation of a variety of interrelated and inter-dependent factors that have transformed how information is transmitted between the various stakeholders in workplaces. The main factors that have contributed to this evolution have been the combined forces of socio-political globalization and technological innovation. According to Eunson (2008), the net effect of this symbiotic synergism between politico-economic globalization and technological innovation has been the advent of new modes of information exchange within the workplace that have either supplanted or supplemented existing communication modes. The pace of such transformations has been further accelerated by changes in management styles and organizational structures.

Since the mid-70s onwards, the destructuralization of workplace organizations has contributed to the emergence of less formal conventions of communications. Hierarchical organizations have been increasingly supplanted by more decentralized and collegial structures in which information flows vertically, horizontally or diagonally both intra and interdepartmentally (Nelson & Quick, 2003). This metamorphosis has been further accelerated with advent of globalization and Information Technology. The former had the net effect of contextualizing the role of business and private enterprise in a borderless environment and in the process leveraged on the potentialities presented by IT to compel transformations on how business communication was effected. Hence, organizations operating as disparate entities in diverse business environments have adopted a more open and interconnected approach in which cross organizational linkages have gained prominence (McShane & Von Glinow, 2003).

Within the engineering and IT realms, these developments have led to a revision into how engineers and IT professionals conduct job-related tasks and transactions as new channels

of information transfer materialized (Dickson & DeSanctis, 2001). With technology driven features such as multitasking, telecommuting, and teleconferencing becoming industry standards, traditional modes of communication have been subsumed and transmuted in the process (Johnson & Chang, 2000). The new tools of this socio-scientific revolution have shaped communication modes with their capacity to transmit information chunks through a variety of aural, visual and spoken means as well their capability of seamlessly linking distant stakeholder communities within an information/communication loop (Morreale et al., 2001). These communication tools, christened new media communicative tools, possess the capacity to transfer information almost instantaneously given their ability to leverage upon enhanced IT infrastructural platforms such as increased bandwidths.

Researchers agree that the advent of globalization and the extensive infusion of Information Technology has had a transformative impact on workplace communication (Patil, 2005; Schnell, 2006; Thomas, 2007). In fact, contemporary developments in communication skills amongst engineers are essentially predicated on “globalization of engineering education and the increasing mobility of engineering professionals around the world” (Patil, 2005: 49). Adler & Elmhurst (2002) contend that when face-to-face communication is not possible (due to separation by great distance which causes the charges of communication to be costly, time-consuming and impractical), teleconferencing, telephone and voice mail may take place in the workplace. They also highlight the importance of good listening skills as the relationship between listening and speaking needs to be emphasised as both skills are interrelated. Peters (2002) suggests that effective communicators in the IT industry must possess good oral skills because employers in the IT industry spend considerable time communicating with people in the workplace as technical professionals are fundamentally problem solvers.

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