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Collaborative ICT Tools and Organizational Development

4.1 Video communications as strategic business tools

Video communications through such means as PCs, smartphones, mobile videophones and tablet PC underpin the potential to create new work styles, lifestyles and daily habits that together make up the new “imaging culture.” Thanks to the expansion of broadband and emerging ubiquity, means of communication ranging from voice and data to still images and video are rapidly developing in conjunction with the diversification of person-to-person communications and collaboration. This chapter takes a systematic look at the relationship between video communication tools (VCTs) and organizational transformation over the past ten years, and delivers new insights into the impact of VCTs on corporate ICT and knowledge-creation strategies in this broadband and ubiquitous era.

As mentioned in Chapter 2, a great number of corporations are currently incorporating all kinds of groupware, ERP tools, weblogs and web-based tools to encourage communication and information sharing across and between organizations to promote best practice and knowledge management. But among the companies that are already using these tools to reform and innovate corporate culture, the failure of e-mail and groupware to adequately strengthen communication inside and outside the organization and accelerate the decision-making process has already been brought to the fore.1 In this regard, VCTs can be considered the ultimate practical ICT tool to lead a company down the road to transformation and resolve the “closed-off” feeling that results from the inadequacy of e-mail or groupware to satisfactorily convey the will and sentiment of individuals, because VCTs enable richer discussions and more efficient decision-making.

Historically in the world of communications, the video medium was generally high priced, often poor quality and difficult to use, and designed...
for specialized corporate applications. Recently, however, the remarkable development of broadband and mobile multimedia communications infrastructure and video and voice digital encoding technologies have led to the rapid emergence of highly functional, low-cost, compact and user-friendly VCTs, including video and web conferencing, smartphones, mobile videophone, video chat services and IP multimedia phones. Furthermore, the unified communications that integrate these functions have resulted in more diverse possibilities with video communications that are suited to both business and consumer use. In addition to the technological drivers, market drivers including applications as collaboration tools for advancing global business, strategic outsourcing and off-shoring and business models involving dispersed product development project teams have also become key factors in accelerating penetration and market expansion. There are soaring demands for multimedia communications not only from big businesses but also from small office/home office (SOHO) businesses, education, health care, welfare and so forth.

VCTs enable flexibility with different means of communication (voice, text and video, in real and non-real time), and seamless communications between different terminals, including IP phones, PCs, dedicated video terminals, smartphones and mobile phones. Connecting these multiple means of communication benefits companies by boosting business efficiency and production, and encourages creativity (including creating new ideas). Thus, VCTs are becoming recognized as strategic ICT solutions that hone the competitive edge. The world’s most advanced companies today are proactively applying these tools in B2B and B2C settings as described in Chapter 3.

This chapter illustrates how VCTs become enablers that transcend space and time to promote the creation of new business “knowledge,” and delivers new findings and managerial implications vis-à-vis practitioners and academics specializing in business and management, based on survey analysis of usage structures in a range of business fields (manufacturing, IT, finance, retail, education, medical treatment and welfare, etc.) and in public institutions in Japan, the US and Europe. The chapter also presents new insights drawn from a decade of field research (including participant observation, ethnography, and interviews) (see Appendix: Research Methodology).

4.2 ICT and corporate innovation

Broadband networks now feature bandwidths that have enabled “always-on” connections to become commonplace, and have dramatically