A pilot exercise on the cost-benefit analysis of the use of internal email was performed at the Danwood Group. This forms part of a larger exercise to evaluate computer communication to help enhance performance throughout the organisation. The chapter has resulted in the creation of an internal email costing process showing when it starts to become a more efficient means of communication.

In this study, the times taken to read, write and perform other functions with email were measured for a sample of employees. The email content was also monitored to determine which emails were business related. It was found that nearly two thirds of all emails were non-business related at the start of the research, but this decreased to a consistent 43% towards the end.

INTRODUCTION

Through communicating, we exchange our thoughts, ideas, opinions, feelings with other people, at work, and in all aspects of life. The communication process is so commonplace that it becomes second nature, though analysis shows it is much more complex and much less efficient than is normally assumed.

As companies struggle to shed excess costs and to respond more nimbly to customers and competitors, they are being urged to adopt new organisational forms, tightened inter-organisational linkages, and improved management practices (Miles &...
Snow). To support these “network” forms of organisation, more and more firms, especially those that are geographically dispersed, are turning to electronic networks—advanced communication media, such as electronic mail (White, 1996). By understanding the communication process we can optimise networks to increase communication efficiency with benefit to our productivity. As communication pervades nearly everything we do, even small improvements in the effectiveness and cost of our communication processes can have significant benefits. The chapter builds on published work, by Solingen, Berghout and Latum (1998) and Jackson, Dawson and Wilson (1999), identifying email productivity and efficiency costs and generating questions on how to enhance performance throughout an organisation using electronic networks.

As new communication methods are introduced into organisations it is important to understand how and why managers use the new media (Markus, 1994), as it is not the media per se that determines communication patterns, but rather the social processes surrounding media use (DeSanctis & Poole, 1994). By understanding communication methods, the mediums can be optimised to enhance performance within organisations. We still have much to learn about interactions among computer-mediated communication technologies, new organisational forms, and changes in work and communication (Daft & Lewin, 1993), but the ability to monitor email now provides organisations with the opportunity to improve communication practices.

SOFTWARE TO RECORD EMAIL METRICS

The Danwood Group had no email usage policies that would restrict and bias monitoring, which was performed in two phases. The users were aware that email metrics were being recorded for research purposes in stage one, but not in stage two.

Stage one involved developing a special, client based email application, ‘The Danwood Mail’, to analyse the users activities whilst using email for internal communication. The program records the message word length, how long it takes the user to read or compose the email, the subject, the recipient, the author, the time and the date the email was sent. The deletions of emails were logged but were not timed, as the time taken was insignificant.

Stage two involved replacing the Danwood Mail application with Microsoft Outlook and using a new server based email recording application.

EMAIL COMMUNICATION ANALYSIS

The following results have been given in terms of business email (contains business related information) and non-business email (not business related, such as jokes or messages regarding social activities). It is assumed in this paper that non-business email implies it is non-productive, however, this is the subject of ongoing research.

At the start of stage one, 69% of email was non-business related and during stage two that figure decreased to at a consistent level around 43% for several months (see