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INTRODUCTION AND BACKGROUND

Email is increasingly favoured as a major communication tool in UK and Australian educational establishments. The aim of this paper is to examine patterns of email usage in the two countries and to try to isolate some of the cultural aspects of the use of email between the establishments studied. These cultural aspects will be addressed more fully when the study is expanded to include other European countries.

Work already undertaken (Coakes and Willis, 2000, Willis, to be published) has examined the situation in the UK in some depth. A comparison with Australia was undertaken as the first step in opening up the research on an international basis. Australia was selected because of the many similarities between the two countries. The educational establishments also follow the same lines, colleges and universities, which makes the comparison easier and the differences more visible. The same multi-choice questionnaire was utilised, this time with Leeds Metropolitan University and Doncaster College in the north of England and Victoria University of Technology, Australia. Victoria University includes both a higher education sector and a TAFE (Technical and Further Education) component. The TAFE sector is almost the equivalent of the college in the UK. This allows us to make general comparisons across both sectors whilst bearing in mind that other factors will have a part to play.

EMAIL AND PATTERNS OF USAGE

Possibly the most important problem (see also Woolston and Lipschutz 1998) was that of overload in email systems. Staff seem to be increasingly concerned about overload in the workplace, given the numbers of email messages in circulation on a daily basis and the ramifications of this in terms of their ability to operate effectively.

Major authors in the field, Culnan and Markus (1987) and Sproull and Kiesler (1986) look at problems with email caused by lack of social cues and the effects this would have on communication. Technological advances such as the advent of the mobile phone with its massive impact on communication style from the use of text messaging makes some of these concerns seem dated. Previous studies in this area (Coakes and Willis op cit and Willis op cit), have identified cases in UK academic institutions where a consideration of social cues is deemed to be less important than other factors. The real issues lies around when to use email - when is it an appropriate medium and should it ever to be used as the sole medium?

Lucas (1998) considers the social and technical components of email. He looks at email as a sociotechnical system in that it consists of the technology and the social and psychological factors that shape individual use. Where the use of the technology produces a change in working practices which reflects joint optimisation of the technology and the people, email can be said to operating within the strict definition of a sociotechnical system. Email is shown to be changing the way in which people communicate in that it has provided an asynchronous communication tool, independent of time or place barriers which facilitates global communication. The question then is to what extent does this allow joint optimisation and a change in working practices?

Knowledge organisations such as academic institutions can use email to change the way in which they store and transmit knowledge between individuals. The total effect on the organisation will be dictated by a variety of factors, Kraut and Attewell (1997) identify a category called 'heavy communicators' who they say are likely to use all forms of media on a frequent basis. The proportion of staff falling into this category will have an effect which is difficult to measure. Organisational email policy is also likely to influence the extent to which email can change existing norms.

Computer Mediated Communication (CMC) research is often concerned with the view that the computer itself is the sole influence on communicative outcomes, whereas it is obvious that the human element has a vital role to play - humans communicate, technology is merely a facilitating mechanism. Markus (1994) found that email was suitable for all work-related communication with the exception of confidential matters. This would tend to support the argument that previous concerns regarding the 'richness' of the communication are of less concern in a workplace setting. Questions such as, 'Do people use email as primarily a 'work' tool or as a method of communicating with others and building relationships in a working environment?' need to be addressed in relation to each organisation studied.

Emails may be regarded as innovative in that they portray informal, interpersonal communication. Walther et al (1996) argue that the relative absence of formal rules enables people to use abbreviations and professional jargon to more accurately convey meaning. Concerns for those in the workplace include matters such as the point at which jargon interferes with the message and to what extent jargon is used to build work relationships thus excluding those who are unable to access the terminology.

Sherwood, (2000) believes that email is a fundamentally different form of communication to paper-based communication in that it leans towards a more conversational tone. There is a tendency for emails to be not so rigorously or painstakingly constructed as letters or memos and many people see this as a facilitator of the communication process. Sherwood also considers how decisions are made as to when email is the appropriate medium for a particular communication. This may be dictated by an organisations policy on email or simply by custom and practice. Where there are no written rules, appropriateness must be determined to some extent by organisational culture, but as an unwritten rule, it is easy for newcomers to fall foul of the system without realizing it. Consideration must be given to what would happen to the social side of the system if email is used inappropriately - would this change patterns of usage or bring about new norms of social behaviour? From an UK perspective, legislation for the monitoring of email (The Regulation of Investigatory Powers Act 2000), gives employers the power to monitor employee email usage. As a response to this legislation, many organisations are having to adopt formal Use of Email policies. From an Australian perspective, the recent Digital Agenda Act (2001) governing the forwarding of email messages without the original sender's permission will have a massive impact in organisations where this practice is commonplace.

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822 Issues and Trends of IT Management in Contemporary Organizations

CULTURAL ASPECTS

Chen (1998) argues that people of different cultural backgrounds are more interdependent than ever before. The new information technologies, including the Internet, are reshaping intercultural communication. It is necessary to consider if people from different countries use the technology in the same or different ways. The outcome of this study will produce markers and signposts as to how these cultural aspects can be brought into play and feed further research in the field. The two countries in question have a similar cultural heritage and this initial work will provide a basis for crossing the cultural divisions identified in Hofstede's (1980) work on the dimensions of national culture. This work was developed by Ronen and Shenkar (1985) and the following eight heritages proposed: Anglo; Latin-American; Latin European; Far-Eastern; Near-Eastern; Germanic; Arab; Nordic; plus an Unclassified category. Each category is based on key cultural values and attitudes and the prediction is that organisational behaviours will be more similar within categories and less similar between them. It should be noted that Australia and the UK fall into the same category so behaviours are expected to be similar.

METHODOLOGY

The methodology chosen was that of an email questionnaire with multiple responses possible. A questionnaire was deemed the most reliable method to obtain results from a large number of people. Open questions were also included to enable staff to give opinions as the comparison of these attitudes would be of major importance to the study. A further factor influencing the choice of an email questionnaire was the geographical distance between the two countries and the proven effectiveness of email in such situations.

The survey was sent to all academic staff and administrative staff within the three institutions and a total of 208 responses were received. We surveyed both full and part-time lecturing staff, but in this paper we report only on the results from the full-time lecturing staff surveyed due to space restrictions.

The delivery of the questionnaire to each member of staff's desktop proved problematic for the UK college, where there was a technical problem in that it was not possible to set a global email list and each questionnaire had to be emailed individually. This did not allow staff to get a feel for the college-wide nature of the research and this may have influenced the results. Indeed, several responses were received on hard copy which had been printed and attached to the college's weekly newsletter rather than the email system

The Australian questionnaire was sent out as a global email only. It is VUT's policy that all new staff, both academic and support, have an email address and despite some early teething problems the email systems is now considered to be reliable. Thus, it was felt that using a global email was the best way to ensure a speedy response. As it was, a number of people chose to return a paper copy by the internal mail. This preference for a particular method of response will be investigated in further research.

ANALYSIS OF RESULTS

In total we surveyed 45 UK full-time lecturers and 51 Australian. The UK cohort contained 10 respondents from the FE (Further Education) sector and the Australian cohort contained 15. We have not analysed the difference between the two teaching sectors but this would be a useful exercise for future work.

In Australia, 84% of staff read their email several times a day, and 96% of UK lecturers did so. All UK full-time lecturers had computers on their own desk, while in Australia 96% admitted this and 4% didn't reply. We can only assume either they didn't know, or they couldn't be bothered to answer as the answer seemed obvious to them!

In both sets of respondents we did not get a full response from all on how many emails per day they received so conclusions are drawn from partial data (89% of Australians and 64% of UK lecturers answered).

Here we see that UK staff are receiving larger numbers of emails than their Australian counterparts. Australian full-time lecturers in

Table 1: Volume of email/day

	UK Full-time %	Australian Full-time %
Less than 10 messages	17	2
10 - 20 messages	10	58
20 - 30 messages	17	18
30 - 40 messages	21	13
Over 40 messages	35	9
		11 1 1 1

60% of cases receive 20 or less emails per day, in contrast to UK staff where 73% are receiving more than 20 and 56% more than 30 emails per day. However the same number (15%) in both countries, admit to hiding behind email - mainly from students! We did receive also the following comment from a UK respondent:

 think your levels of email are rather too conservative, many people receive over 100 daily¹

In Australia, students were the smallest number of email correspondents, most activity went on with other members of staff, 80% corresponding between 25% and 75%+ of the time with other staff and 49% receiving less than 25% of their email from external contacts. In the UK, the pattern was slightly different with 47% corresponding less than 25% of the time, but 13% corresponding between 25% and 50% of the time with students. Email contact with other staff was between 50% and 75%+ for only 51% of the staff. The number receiving email contact from external sources was similar, with 51% of UK staff receiving less than 25% of their emails from external contacts.

In total 44% of UK staff thought that withdrawal of email would be a severe or very severe blow to their work, but 4% also thought it would make no impact. In Australia, 65% of lecturing staff thought that email withdrawal would be a severe or very severe blow, and again 4% thought it wouldn't make much difference to them. This finding reflects the multicampus nature of the university. A UK respondent commented:

 email is currently overused in communications with students and colleagues because we lack an alternative, more appropriate conferencing platform.

When our survey respondents were asked to list some of the benefits and drawbacks of email we had a variety of responses. Clearly the use of email generated some thought amongst our respondents and some very insightful remarks were made. Whilst many staff agreed that speed, cost and efficiency were prime benefits, other benefits mentioned in the UK were: international reach: an automatic paper trail; a reliable means of contacting people when time is not an issue especially those who cannot easily be reached by phone or visit; the ability to address many at once and to swap information asynchronously; the ability to attach documents; being able to keep in contact with those you do not see often; and a saving on phone time.

In Australia many of the same comments were made with speed, cost and efficiency heading the list, but also the quickness of response as compared to fax etc was considered important; the ability to reply at own pace and to choose which issues to reply to were important; the feeling of being in a community with the university and externally regardless of location/geography and local time; in addition it permitted flexibility with the ability to deal with work emails at home being important.

Drawbacks were numerous including the lack of face-to-face contact but also in the UK:

Ambiguity in messages and the potential for misinterpretation; information overload; the use of email as a political weapon (!); apparent loss of emails (as claimed by students...);

the levels of email put pressure on staff especially for a quick reply, leaving them open to not responding to all points, or responding too fast causing a lack of care in composition which upsets others and leads to a series of heated exchanges.

In Australia the volume of junk mail and global emails concerned our respondents more than the lack of face-to-face contact but they were also concerned about:

 The inability to communicate emotion; the impersonal nature of the medium sometimes leading to less than polite or ill-considered messages which seems to heighten the possibilities for interpersonal friction; the often ambiguous nature of the message due to poor use of English, with comments added that email will cause future generations to be unable to write sentences.

It was not considered appropriate to send highly personal or confidential matters through the email system and this was caused by both a worry about the lack of security of the system and possibilities of surveillance, and additionally in the UK due to legislation relating to data protection - one UK lecturer commenting:

 in the light of UK legislation, I will shortly be informing personal tutees etc that they cannot consider email communications with me to be confidential since I don't know who else in the university may be monitoring my email (or phone).

We also asked survey respondents to check their agreement or otherwise with the following statements (Table 2).

Table 2: Statement agreement on email (F/T)

	Australia	UK
	%	%
Email is a benefit to you	88	62
Email is a vital source of information	78	56
Email is a means of creating information overload		44
Email is vital to communicate with the external academic world		49
Email is a vital tool for keeping up with developments in my field	37	33
Email is essential for modern lecturing	25	24
Email is not very worthwhile in lecturing	16	7
Email is a distraction to my main job	14	13
Email is a necessity to performing my main job	49	47

UK respondents were generally less positive about email than their Australian counterparts, but surprisingly considering their comparatively larger volume of email, were less concerned with information overload. It may be this is a result of less use of the global email facility in this particular university as against the Australian university. Full-time UK staff were not convinced about email's role in modern lecturing and some even found it not worthwhile.

In considering email it was felt that:

- it was overall a time saver and not nearly as frustrating as using the telephone (cheaper too since most of my colleagues/students use mobiles!)
- it frees one from a fixed office space and helps me to be able to work from home. Its immediacy means I'll get round to responding whereas I may not with other forms of communication.
- it is both a blessing and a curse. A lot of emails from within the
 organisation are unnecessary and so it wastes time (deleting unread
 or unwanted email). It happens that without email I would not be
 able to maintain close contact with many of my research collaborators within Australia and especially overseas.
- it is so embedded in my working habits, and those of most of the people I work with, that removing email would be more profound an interference with my work than telling a chemist they couldn't use a test tube.

CONCLUSIONS AND FUTURE DIRECTIONS

This paper examined email usage in the UK and Australia. Work in the culture field by both Hofstede and Ronen and Shenkar leads us to expect to find some countries more closely aligned than others. Both the UK and Australia both fall into the 'Anglo' category and thus we might have expected our results should show similarities in email usage and most issues arising from the questionnaire show very similar patterns. Overall, however, the Australian responses were slightly more positive towards email. This may be a function of geographical distance as email is a very effective solution when distance is involved. Currently we are also working with a Scandinavian partner and await with interest their results. We are also seeking participants from other cultural heritages. There is scope for more in-depth work on cultural aspects of email which could not be covered in this paper.

Overload, one of the major problems identified by the researchers, scores highly with all respondents, even though some have better access to the technology than others. Further consideration will have to be given to other methods of communication as this problem gets more prevalent if staff are to continue to function effectively.

Care must be taken when extrapolating from these results as we are looking at only three organisations in total. The UK organisations are reasonably representative of UK institutions (see results from Coakes and Willis, 2000) but we have no data on other Australian academic institutions. Future work could also include adapting the survey so that it could be used outside the academic sphere and it would be interesting to compare results within countries but between business and academe. Certainly, once the 'student' factor was removed we end up with fewer areas for comparison but issues such as keeping up-todate, communicating with the external environment (both academic and business), volume of email and usefulness would be important. Earlier, we briefly mentioned the storage and transmission of knowledge in knowledge organisations such as academe and there is scope for investigating how email and CMC environments support knowledge working environments.

ENDNOTES

1, 2 Original words and expressions left as supplied, but corrections of grammar and spelling done!

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