THE INSTITUTION OF CIVIL ENGINEERS

BRIEFING

INTRODUCING THE INTERNET INTO THE WORKPLACE

MANAGEMENT ISSUES

This briefing sheet has been prepared by the ICE's Information, Communications and Technology Panel (ICTP). Much of the information is taken from the debate 'Graduates should be denied access to the internet', held by CAMP and the Association of London Graduates and Students. This debate took place at the Institution of Civil Engineers's headquarters at One Great George Street, on 24th February 1999. The resulting information has been reviewed and updated to reflect current technology.

INTRODUCTION

Having realised the advantages that internet access can offer, many traditional companies are now deciding that the internet is no longer a fad, but a necessary business tool. In providing internet access to its employees, a company will not only be providing a powerful business tool, but may also introduce a number of problems and culture issues concerning its use. This paper highlights some of these issues in order that companies may address them in their overall implementation strategy.

THE NEED FOR ACCESS.

Providing access to the internet will deliver a number of business advantages:

- Fast, flexible methods of electronic communication.
- Access to vast amounts of current information.
- An internet presence is becoming an expectation, and offers marketing opportunities.
- Forums & expert websites allow users to share knowledge within subject focused sites (e.g. www.constructionplus.co.uk & www.ukconstruction.com)
- Intranets & Extranets can provide a low cost central, world-wide information/ data/ resource delivery system for companies and projects. Firewalls (an electronic barrier) can be used to classify rights of access to information, and prevent unauthorised access, both internally and externally.
- E-commerce (business via the internet) capabilities will become an industry norm. Business managers need to be aware of its potential.
- Wireless data access and capture technologies are evolving rapidly. These will significantly speed up the movement of information, and increase mobility.
- Low cost voice/ video conferencing communication via the internet is set to become a common business tool.

THE PITFALLS OF PROVIDING ACCESS

Providing access to the internet also creates a number of issues which must be considered beforehand. These can be effectively addressed through adequate training, and should be referenced in a clearly defined company policy.

Email:

- Misuse of e-mail for personal and business purposes can have a damaging effect on a company's image, and in extreme cases may have legal implications.
- E-mail has evolved an etiquette, which should be observed to avoid causing offence.
- Attachments and macros can expose internal networks to viruses. This risk and its policing have economic implications.
- Data sent in its original form can easily be used by the recipient for their own commercial gain. Data exchange procedures must set out suitable measures to prevent this.

Forums:

- Electronic forums should not be seen as a replacement for expert knowledge obtained from colleagues; evening meetings; essay groups, and courses. These forms of learning provide environments in which people from various sectors of the industry can share experience in a social, direct way. It has been shown that people absorb much more information when it is spoken, face-to-face.
- Some web based forums can be slow and require a continued commitment. They also tend to be dominated by the same groups of people, and can be limited as a source of information / knowledge.

Information:

- The vast amount of information (most of which will be irrelevant to legitimate business use) means that searching for information on the Internet can be time consuming. Training in methods of data retrieval must be conducted, and done so frequently enough to keep pace with the rapid change of web technology.
- Non-business use of the internet will exist – Pornography; Chat sites; Music; TV; Shopping e.t.c. Controlling and/or monitoring its use by employees has a financial implication and can cause resentment and ill feeling.
- Control of plug-in software, which is downloaded and installed locally on machines (demanded by advancing web page technology) should be considered.

Training:

- The internet has become a significant business and commercial tool over the last 5 years, and will continue to develop at an rapid rate.
  Adequate training must be programmed to ensure that the full benefit of the internet as a business tool is realised. This will require an ongoing financial commitment to keep pace with web developments.

SUMMARY

Whilst the overall benefit of internet access is widely accepted, there are serious issues which must be addressed before a company's work force is provided with access. Access is provided to meet business needs, the need for a person to have access should therefore be assessed. Once provided, access must be controlled, either by restriction or by monitoring against a stated policy.

As with any business tool, its potential can only be realised when the user is able to fully utilise it. Training in the use and miss use of the internet is therefore essential. Training will also serve to protect both the employee and the employer.

The need for a clear management policy on the promotion and use of the internet cannot be overstated.

John Kinns, Babtie Group
john@kinns.org.uk
April 2000.

Briefing Sheets are provided free of charge to help increase knowledge and awareness. They may be freely copied. Care is taken to ensure information is correct, however readers are advised to consult source documents for authoritative information. The Institution of Civil Engineers is a registered charity No 210252, 1 Great George Street, London SW1P 3AA.