The information behaviour of consulting engineers in South Africa

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Presentation outline

- Who are consulting engineers
- Engineering tasks
- Sources of engineering information
- Internet as a source of information
- Use of digital cameras
- Personal contacts

WHO ARE CONSULTING ENGINEERS?

- Experts in their field of engineering
- They are employed for advice, guidance in designing systems and the implementation of planned projects
- Compulsory registration: Engineering Council of South Africa (ECSA)
- Voluntary affiliation: South African Association of Consulting Engineers and institutes or associations of individual fields of interest

ENGINEERING TASKS

- Simultaneously involved in various engineering projects

- Engineering projects are divided into stages

- Several tasks need to be completed during each stage

- Various sources of information might be needed to complete a task

- The project provides the context of their information needs

Sources of Information for Acoustical Engineering projects

TYPE OF PROJECT

SOURCES OF INFORMATION

ACCOUSTICAL BUILDING DESIGN

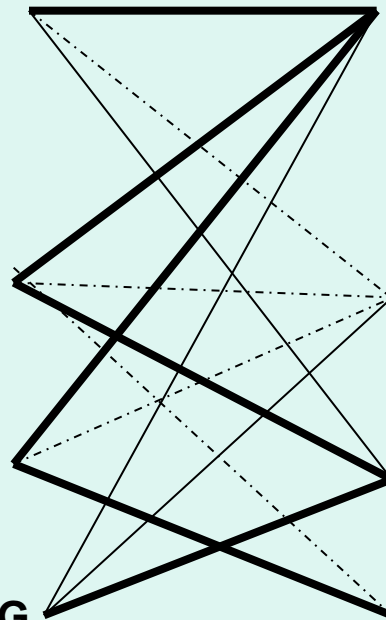**NOISE CONTROL**

EIA "NOISE IMPACT STUDIES

SOUND SYSTEM PLANNING

Textbooks, copies of articles from subject journals, standards, regulations, etc – PERSONAL LIBRARY

Internet, manufacturer's information, regulations etc

Personal communication: telephone, visits, lectures

Indirect communication through the client

ENGINEERING SOURCES

- **Reporting stage**: personal contacts, e.g. clients, architect, geotechnical engineers.
- **Preliminary design stage**: personal contacts, architectural design and drawings, suppliers, visits, textbooks, codes of practice, standards, brochures, engineering trade journals, Internet, email, design software, personal knowledge, personal files.
- **Design and tender stages**: architectural designs and drawings, suppliers, catalogues, brochures, pamphlets, standards, regulations design software, personal contacts, journal articles.
- **Working drawing stage and construction stage**: System test results, system's behaviour, construction site reports, digital cameras, brochures, factory test results.
- **Target procurement stage**: Project and site related information

INTERNET

- Search engines: Google, Altavista, Dogpile
- Internet resources: AskJeeves, Wikipedia, subject portals (e.g. *Plant Maintenance Resource Centre)*
- Specific websites (e.g. www.acts.co.za, client's websites)
- Email communication
- FTP sites

USE OF DIGITAL CAMERAS

Digital cameras (cellphone cameras) are used to:

- Record progress
- Problem solving – over a distance
- Diagnostic purposes
- Retrofit projects: photographs assist in adapting designs

INTERPERSONAL CONTACTS

- Often the only source of information
- Project determines who will be contacted

Who will be contacted:

- Client/s
- Members of the professional team
- Contractors
- Colleagues

CONCLUSION

- Work roles are embedded in tasks
- Preliminary design stage requires information from diverse sources
- Important sources of information: people, internet, digital cameras
- Future research: social networking, use of ftp sites, digital cameras