

Scope and Coverage This topic will cover: Introduction to the professional issues in IT module Introduction to ethics Introduction to social, legal & professional issues in IT Why standards and issues are so important

Learning Outcomes By the end of this topic, students will be able to: Define and explain social issues from perspective of IT professional Name key ethical considerations when creating a code of ethics Identify and explain key legal considerations as an IT professional

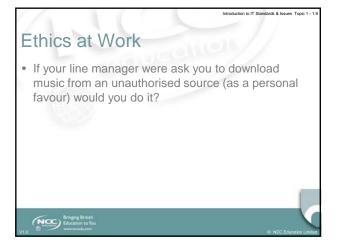
Module Aim To introduce key professional issues in IT from the perspective of the IT professional, enabling students: To gain knowledge of terminology and concepts facing IT professionals; To identify, explain, develop, analyse, evaluate and report on a variety of IT industry issues.

Module Content Social and legal issues as an IT professional Project management lifecycle and strategy Software deployment issues Risk management – its place in IT Service management within the IT sector Software quality – policies and procedures

Wey Module Points All topic areas will be explained during lectures Undertaking additional reading will enhance your understanding Ask questions — if you are thinking of a particular question, someone else probably is too! Work together — it will build your knowledge

Social Issues in IT Social responsibility as an IT professional begins, and arguably also ends, with you. Underlying all social issues is your *moral code*: Who you are How you value others What you are and are not willing to do





Ethics in IT - 1 Incredibly subjective Based on an individual's learnt & taught behaviour General consensus that ethics education has merit Always requires balance Limiting others' actions can be resented Known as Corporate Ethics within organisations: Can have internal impacts Wider reaching than industry as answerable to wider audience (e.g. jail terms)

Ethics in IT - 2 Industry wide responsibility is now being taken. Many companies have: Corporate Ethics Board Corporate Ethics Officer Corporate Code of Ethics Ethics Training

Kallman & Grillo's Ethical Framework Understand situation Identify facts, identify stakeholders Identify key ethical issue What is the issue? What action should be taken? Analyse alternative ethical solutions What are the consequences? Make decision & implement action Decide how to act and justify decision Create an action plan and report to stakeholders Document the findings

Company Codes of Ethics - 1 • Many companies write their own codes of ethics - Aims section - Constraints section • Key considerations: - Make code bespoke - Consult stakeholders & employees - In house development - Research - Set boundaries - Consider training - Enforce code - Review regularly

Company Codes of Ethics - 2 • Many companies within the IT industry now publish their codes of ethics (conduct) on web. - Google: http://tinyurl.com/66lbjmk - 3D Systems: http://tinyurl.com/6daxz3n • As do many companies not primarily in the IT sector - Walt Disney: http://tinyurl.com/5wb82ey

International Bodies' Codes of Ethics International industry bodies Variety of codes of ethics Best practise Examples of industry bodies' codes of ethics: IEEE Computer Society: http://tinyurl.com/65tle7n Council of European Professional Information Societies (CEPIS): http://tinyurl.com/6kzb8zo

Starting to gain momentum Arguable that has effect on generating business Green IT policies Becoming more common especially amongst forward thinking organisations Green IT being written in to Mission Statements As an IT professional, it is important to understand your responsibilities. Shut down all IT equipment at the end of the day. Remove active screensavers.

Operate environmentally friendly printing practises. Paperless Network printers Default double side printing Recycled products Operate data storage redundancy identification. Streamline software features Consider updates rather than automatically accepting them Virtualisation Can you name any others?

Legal Issues in IT Many legal issues will affect you as IT professional. There are ever evolving legal requirements due to the nature of the industry. It is essential if to consult specialist legal advise. Legal requirements are complex. There are many branches of IT law. Cyberspace has been established as legal territory. This allows prosecution of organisations/individuals.

Intellectual Property Rights (IPR) - 1 • As an IT professional, it is important to have an understanding of IPR. • Financial barriers to distribution of software are broken down. - Downloading - Threatens companies' return on investment (ROI) • It is vital that organisations protect their products - Excludability

Intellectual Property Rights (IPR) - 2 • Technical - Licensing fees - Product codes - Encryption • Legal - IPR specific laws - Protection of own & companies from overseas • IPR is controversial - Exclusion

Intellectual Property Rights (IPR) - 3 Currently no single international authority in IPR Moving closer to this World Intellectual Property Organisation (WIPO) More and more importance being placed on IPR

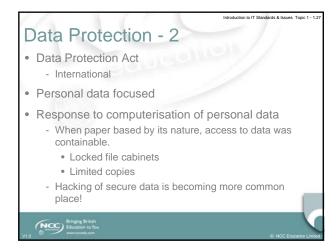
Copyright A copyright is a set of exclusive rights granted by a state to the creator of an original work or their assignee for a limited period of time upon disclosure of the work http://en.wikipedia.org/wiki/Copyright

Copyright — Ownership - 1 Organisations write ownership into contracts As an employee, the organisation will usually 'own' your ideas & deliverables Even ideas developed outside of working hours can be claimed by an organisation As IT professional, you should always remain aware of this fact. If there is an issue you must negotiate before signing a contract On leaving an organisations employment, ownership remains with the company.

Copyright — Ownership - 2 Software specific copyright Incorporates individual programs/code & software package compilation Can incorporate screen display formatting (where other alternatives exist)

Copyright - Reproduction What percentage of work can be reproduced without the original author's permission? Author/originator receives legal 'rights' One's 'own' expression of an idea not idea itself Reworking of idea is legal (knowledge/experience) Fair use is the term for a rule allowing a certain amount of the original work to be reproduced without getting further permission from the owner.





New focus Personal data collected for specific purpose only Relevant data collected only Data used for specified purpose only Data deleted Individuals supplying data have right to inspect Limited access to data Secure transfer of data essential e.g. Sony hacked – millions of consumers data Time for even tighter legal protection?



Privacy - 2 As IT professional it is your responsibility to disclose data breaches to your manager, but where does your responsibility end? What if your organisation does not report data breaches to relevant authority? Chicago Bright Bright Manager in The Company of the

Privacy - 3 Potential arguments: My responsibility ends with informing my manager. How far my responsibility extends is more ethical than legal. If my organisation fails to act, I would feel obligated to take breach to relevant authority. I would lose my job for sure – it is not worth it. A serious situation which has and will occur again Industry codes available Code of Fair Information Practices European Union Data Protection Directive



European Union Data Protection Directive Regulation of personal data processing within the EU Prohibits personal data transfer to non-conforming, non-EU countries To gain standard can be costly & lengthy May require creation of government data protection agencies 3 key principles: Transparency Legitimate purpose Proportionality

Workplace Enforcement Increasingly common in IT "We are watching you" Official organisation policies Establishes acceptable behaviour Protect organisations against: Productivity Lawsuits Monitor All communication All activity Legal but ethical?

References - 1 • Hall, P & Fernandez-Ramil, J. (2007). Managing the Software Enterprise. Thomson. • Kallman, E & Grillo, J. (1996). Ethical Decision Making and Information Technology. McGraw-Hill Education. • O'Neill, M. (2010). Green IT for Sustainable Business Practice. British Computer Society.

References - 2 • Quinn, M. (2010). Ethics for the Information Age: International Version, 4th Edition. Pearson Education. • Reynolds, G. (2010). Information Technology for Managers. Course Technology. • Schwalbe, K. (2006). Introduction to Project Management. Thomson.

