THE UNIVERSITY OF SYDNEY

INFO5990
Professional Practice in IT

School of Information Technologies
University of Sydney

Lecture 03A Information System Audit

COMMONWEALTH OF AUSTRALIA

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Quick Update

- **Group Assignments:**
  - Be in your teams
  - Are there still any orphans without a team ?
  - All teams to have a project to work on
  - Next week start working on the proposal / and content
- Individual Oral Assignments
  - Have an idea of your IT entrepreneur you admire
  - Start researching during the coming week
  - Plan what you are going to say
  - Use next weeks lecture to help with the presentation
  - Any questions on this ??

Quiz 1

- 60 minutes / 10 marks
- 25 questions / 3 minutes per question (Tooo easy !)
- Open book / use your slides, only 1st 4 weeks lectures
- 1 attempt to answer questions – otherwise it is too easy
- Random questions – cant copy your mates answer !
- Open from 10/8 at 5pm till 21/8 at 11pm – 1 week
- **CANNOT HAVE 155 STUDENTS CLAIMING INTERNET WAS DOWN – THEY GET 0%**
- **Marks released after the end of the quiz**
- **COMPLETE IN 1 GO, DO NOT OPEN TO TRY ! – will not reset for you !**
- **WILL NOT ACTIVATE AFTER THE 21/8 11PM !!!**
- **No excuses will be allowed**

Groups

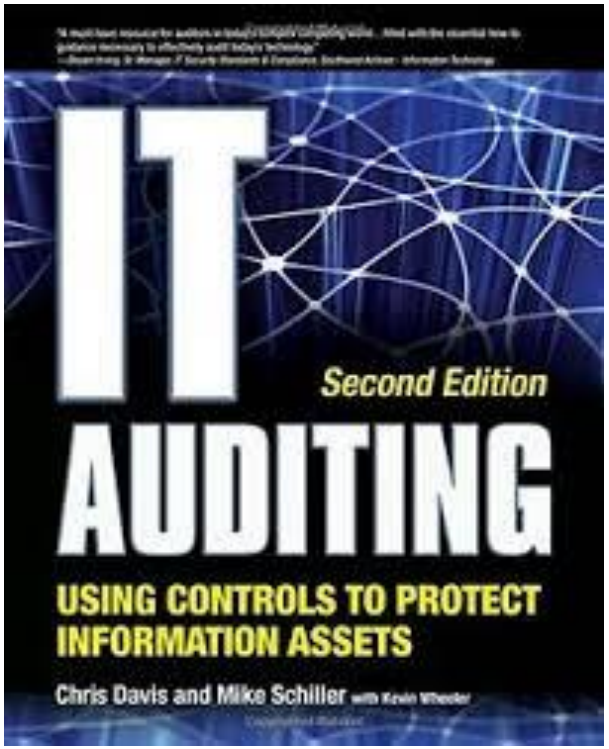
- **Some people still not in groups**
- **Failure to do so will mean a maximum mark of 50% for group assignments and group oral presentations – EVEN IF THE GROUP RECEIVES A High Distinction !**
- **Failure to do so will mean a lot of stress as your team mates will have their marks while you will not receive your 50% till the end of the term !**

IT Audit Professionals

Can earn between $1000 - $2500 per day !!
Any one interested ??

Agenda
Information System Audit

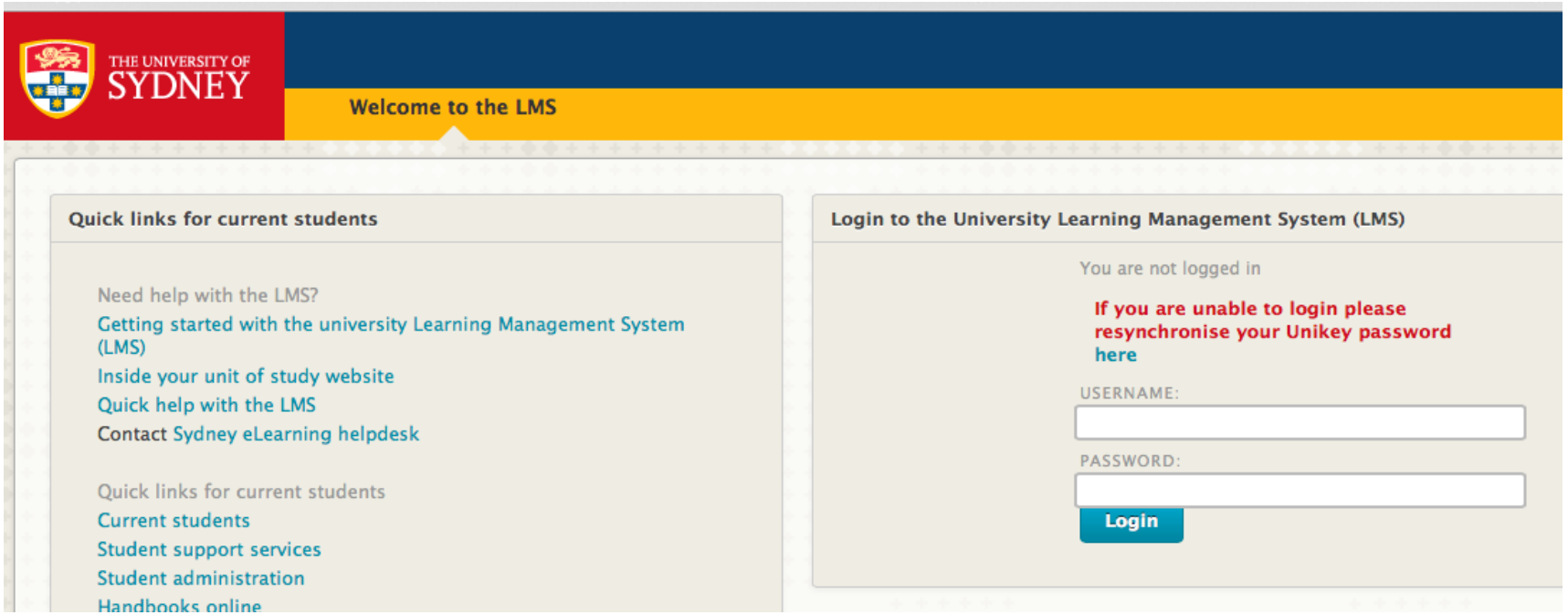
- Introduction
- Scope of an audit
- Risk Based Approach
- Audit Process



Scenario

Congratulations your company has been nominated to do an audit !

You have been nominated to conduct a Information Systems Audit on the University's E-learning site.



Scenario

What is expected to be audited?

What would NOT be covered in the audit?

How would you do this?

Definition

"The process of collecting and evaluating evidence to determine whether a computer system (information system) safeguard assets, maintains data integrity, achieves organisational goals and effectively and consumes resources efficiently"

Ron Weber

What is Auditing

Information Systems are integral to organisations.

Key business processes are enabled using information systems

The purpose of IS audit is to review and provide feedback, assurances and suggestions.

Why Audit

S.Anantha Sayana (2002) outlines 3 key areas of concerns that IS Audits need to address:

Availability	Will systems be available for the business at all times when required? Are systems well protected against all types of losses and disasters?
Confidentiality	Will information in the system be disclosed only to those who need it?
Integrity	Will the information provided in the system always be accurate, reliable and timely? What ensures that no unauthorized modifications?

3 – Areas of Audit

S.Anantha Sayana outlines 3 key areas of concerns that IS Audits need to address:

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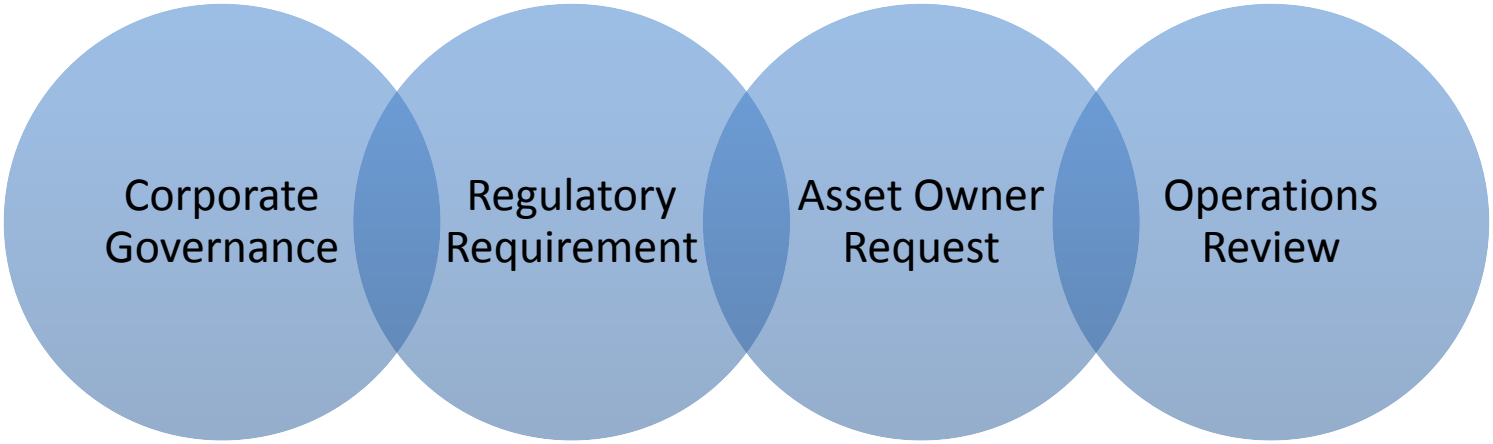
Confidentiality	Will information in the system be disclosed only to those who need it?
Integrity	Will the information provided in the system always be accurate, reliable and timely? What ensures that no unauthorized modifications?

Back to our scenario: Are these concerns relevant to our requirement to audit the University's Elearning site?

Why is an IS Audit done?



Question

Think of a function in your organisation to be audited

Scope of an IS Audit

- Physical and environmental review
- System Administration review
- Application software review
- Network Security review
- Business continuity review

Scope of an IS Audit

- An audit may vary in how much is covered. For instance, it may only scrutinize only 1 of these elements or a degree of all or some components described on the previous slide
- It is important to cover all elements but they do not need to be done in one assignment
- Skills sets required for each element are different

Could depend on the client sometimes

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Case Study

SIEMENS

CLIENT WANTS TO MAKE SURE

Case Study - audit

SIEMENS

- Physical and environmental review
- System Administration review
- Application software review
- Network Security review
- Business continuity review
- Data Integrity review
- Operational - +55 degrees / -25degrees

Risk Based Approach

- Risks can affect each system differently
- Example: Non availability of a system
  - Restaurant booking system V Company Blog
- Example: Unauthorised access to system
  - Online Banking V Hair Salon booking system

Risk Based Approach

1) Conduct an inventory of the information systems and categorise them

2) Identify which systems impact critical functions or assets

3) Assess risks that affect the system assign a severity rating to them

4) Rank Systems and decide audit priority, resources and schedule

The Audit Process

- Preparation
- Formal Kick off
- Audit in progress
- Formal Findings Presentation (Report)
- Follow Up on Corrective Actions
- What else ? Certification in some cases

Let's take a
Break.
Please be back in
30 seconds