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Your IT Audit and Information Security Partner

CISA Exam Preparation June 2015

*Session 4 : 31 March 2015*

*Starting around 4:45pm .....*



# Agenda

- Introductions
  - Facilitator
  - Participants
- Recap on prep expected and provisional schedule
- Chapter 2 overview : Governance and Management of IT
- Challenges, Questions and answers
- Next Week
- Questions And contacts

*Note : Resources : Additional slide on questions from [AuditScripts.com](http://AuditScripts.com)*



# Introductions

- **Facilitator**
- Justin Williams B.Com, B.Compt (Hons), CA(SA), MBA, CISSP, CGEIT, CRISC, CISA
- 1<sup>st</sup> in the World, CISA Dec 2014
- Director at ITSec
- Previously Head of Risk, Security, Governance and Compliance for Transnet Group
  
- **Participants**
- Name
- How was the first Chapter
- What was your most challenging activity of the week?



# Recap on Prep :Wk 1 of Ch2

## (31/3/2015)

- What you need to do
- Read Chapter 2 (aim for the whole chapter), 46 pages
- Make notes of things you don't quite understand
- Do the sample questions (aim to do at least 20 questions)
- Flag those you get wrong, even if you know why you got them wrong
- Arrive on time (4:45pm Tuesday 31/3/2015)
- At ITSec offices, Forest Office 6, 15 Summit Drive, Sherwood, Durban
- Broadcast live on Google Hangout on Air (check j-j.co.za for link)
  
- Re-assess
- See how things are going
- See how all doing with the time commitment
- Decide if continue with two weeks per chapter or cover some chapters in one week



# Provisional Schedule

10-Mar-15	Introduction (Complete)
17-Mar-15	Chapter 1 The Process of Auditing Information Systems
24-Mar-15	Chapter 1
31-Mar-15	Chapter 2 Governance and Management of IT
07-Apr-15	Chapter 2
14-Apr-15	Chapter 3 Information Systems Acquisition, Development and Implementation
21-Apr-15	Chapter 3
28-Apr-15	Chapter 4 Information Systems Operations, Maintenance and Support (Raniel Misra)
05-May-15	Chapter 4 (Raniel Misra)
12-May-15	Chapter 5 Protection of Information Assets (Raniel Misra)
19-May-15	Chapter 5 (Raniel Misra)
26-May-15	Revision
02-Jun-15	Sample Exam
09-Jun-15	Final Exam Techniques
13-Jun-15	Exam Date

*Raniel Misra : Senior Manager : Information Systems Auditing,  
Auditor General of South Africa*

***Weekend sessions have not been added yet. Consider dates***



# Chapter 2:

## Governance & Management of IT

<i>Dom</i>	<i>Description</i>	<i>%</i>	<i>Start</i>	<i>End</i>	<i>Pages</i>	<i>Marks/Page</i>
1	The Process of Auditing Information Systems	14%	29	62	33	0,42
2	Governance and Management of IT	14%	78	124	46	0,30
3	Information Systems Acquisition, Development and Implementation	19%	141	219	78	0,24
4	Information Systems Operations, Maintenance and Support	23%	234	290	56	0,41
5	Protection of Information Assets	30%	306	375	69	0,43

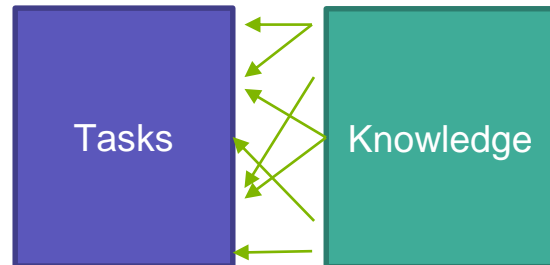


# Chapter 2 Overview

## Governance & Management of IT

- 11 Task Statements

- 2.1 Evaluate the effectiveness of the IT governance structure to determine whether IT decisions, directions and performance support the organization's strategies and objectives.
- 2.2 Evaluate IT organizational structure and human resources (personnel) management to determine whether they support the organization's strategies and objectives.
- 2.3 Evaluate the IT strategy, including the IT direction, and the processes for the strategy's development, approval, implementation and maintenance for alignment with the organization's strategies and objectives.
- 2.4 Evaluate the organization's IT policies, standards, and procedures, and the processes for their development, approval, implementation, maintenance, and monitoring, to determine whether they support the IT strategy and comply with regulatory and legal requirements.
- 2.5 Evaluate the adequacy of the quality management system to determine whether it supports the organization's strategies and objectives in a cost effective manner.
- 2.6 Evaluate IT management and monitoring of controls (e.g., continuous monitoring, QA) for compliance with the organization's policies, standards and procedures.



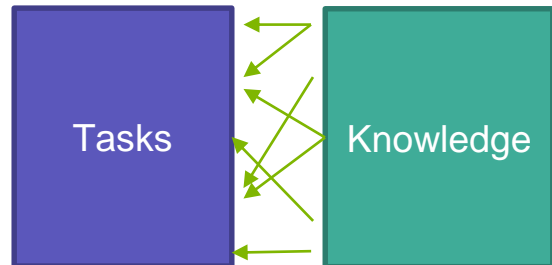
# Chapter 2 Overview

## Governance & Management of IT

- 11 Task Statements ...

- 2.7 Evaluate IT resource investment, use and allocation practices, including prioritization criteria, for alignment with the organization's strategies and objectives.
- 2.8 Evaluate IT contracting strategies and policies, and contract management practices to determine whether they support the organization's strategies and objectives.
- 2.9 Evaluate risk management practices to determine whether the organization's IT related risks are properly managed.
- 2.10 Evaluate monitoring and assurance practices to determine whether the board and executive management receive sufficient and timely information about IT performance.
- 2.11 Evaluate the organization's business continuity plan to determine the organization's ability to continue essential business operations during the period of an IT disruption.

- Group Discussion on these



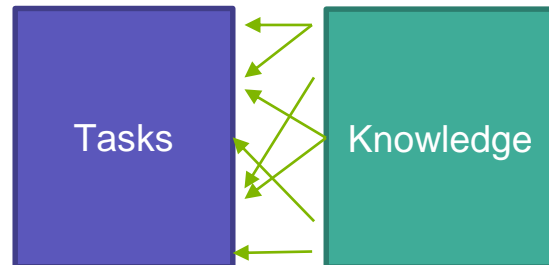


# Chapter 2 Overview

## Governance & Management of IT

- 16 Knowledge Statements

- 2.1 IT governance, management, security and control frameworks, and related standards, guidelines, and practices
- 2.2 the purpose of IT strategy, policies, standards and procedures for an organization and the essential elements of each
- 2.3 organizational structure, roles and responsibilities related to IT
- 2.4 the processes for the development, implementation and maintenance of IT strategy, policies, standards and procedures
- 2.5 the organization's technology direction and IT architecture and their implications for setting long term strategic directions
- 2.6 relevant laws, regulations and industry standards affecting the organization
- 2.7 quality management systems
- 2.8 the use of maturity models
- 2.9 process optimization techniques
- 2.10 IT resource investment and allocation practices, including prioritization criteria (e.g., portfolio management, value management, project management)



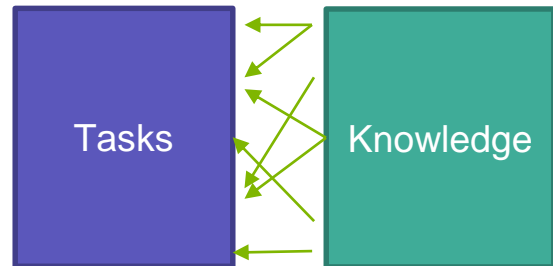
# Chapter 2 Overview

## Governance & Management of IT

- 16 Knowledge Statements

- 2.11 IT supplier selection, contract management, relationship management and performance monitoring processes including third party outsourcing relationships
- 2.12 enterprise risk management
- 2.13 practices for monitoring and reporting of IT performance (e.g., balanced scorecards, key performance indicators [KPI])
- 2.14 IT human resources (personnel) management practices used to invoke the business continuity plan
- 2.15 business impact analysis (BIA) related to business continuity planning
- 2.16 the standards and procedures for the development and maintenance of the business continuity plan and testing methods

- Group Discussion on these



# Chapter 2 Overview

## Governance & Management of IT

- 2.2 Corporate Governance (1 pg)
- 2.3 Governance of Enterprise IT (5 pg)
  - Best Practices for Governance of Enterprise IT
  - Governance of Enterprise IT and Management Framework
  - Audit Role in Governance of Enterprise IT
  - IT Governing Committees
  - IT balanced Scorecard
  - Information Security Governance
  - Effective Information Security Governance
  - Enterprise Architecture
- 2.4 Information Systems Strategy (2 pg)
  - Strategic Planning
  - Steering Committee
- 2.5 Maturity and Process Improvement Models (1 pg)
- 2.6 IT Investment and Allocation Practices (2 pg)
  - Value of IT
  - Implementing IT Portfolio Management
  - IT Portfolio Management vs Balanced Scorecard



# Chapter 2 Overview

## Governance & Management of IT

- 2.7 Policies and Procedures (1 pg)
  - Policies
  - Information Security Policy
  - Procedures
- 2.8 Risk Management (2 pg)
  - Developing a risk management program
  - Risk management process
  - Risk analysis methods
  - Qualitative Analysis vs Semiquantitative analysis vs Quantitative Analysis Methods
- 2.9 Information Systems Management Practices (11 pg)
  - HR Management : Hiring, Employee Handbook, Promotion Policies, Training, Scheduling and time reporting, Employee Performance Evaluations, Required Vacations, Termination Policies
  - Sourcing Practices : Outsourcing practices and strategies, Industry Standards/Benchmarking, Globalisation practices and strategies, Cloud computing, Outsourcing and Third-party audit reports, Governance in outsourcing, capacity and growth planning, third party service delivery management, service improvement and user satisfaction
  - Organisational Change Management
  - Financial Management Practices : IS Budgets, Software Development
  - Quality Management
  - Information Security Management
  - Performance Optimization : Critical success factors, methodologies and tools, tools and techniques



# Chapter 2 Overview

## Governance & Management of IT

- 2.10 IS Organisation Structure and Responsibilities (6 pg)
  - IS Roles and Responsibilities : Vendor and outsource management, Infrastructure operations and maintenance, media management, data entry, systems admin, security admin, quality assurance, database admin, systems analyst, security architect, application development and maintenance, infrastructure development and maintenance, network management
  - Segregation of duties within IS
  - Segregation of duties controls : Transaction Authorisation, Custody of assets, access to data, compensating controls for lack of segregation of duties
- 2.11 Auditing IT Governance Structure and Implementation (1 pg)
  - Reviewing Documentation
  - Reviewing Contractual Commitments
- 2.12 Business Continuity **Planning** (BCP) (11 pg)
  - IS BCP
  - Disasters and other disruptive events : Pandemic planning, dealing with damage to image reputation or brand, unanticipated / unforeseeable events
  - BCP Process
  - Business Continuity Policy
  - BCP Incident Management
  - Business Impact Analysis : Classification of operations and criticality analysis
  - Development of BCP
  - Other issues in Plan Development



# Chapter 2 Overview

## Governance & Management of IT

- 2.12 Business Continuity **Planning** (BCP) (11 pg) ....
  - Components of BCP : Key decision making personnel, backup of required supplies, insurance
  - Plan Testing : Specifications, Test Execution, Documentation of Results, Results Analysis, Plan Maintenance
  - Summary of BCP
- 2.13 Auditing Business Continuity (2 pg)
  - Reviewing the BCP : Review the document, Review the applications covered by the Plan, Review the business continuity teams, plan testing
  - Evaluation of Prior Test Results
  - Evaluation of Offsite Storage
  - Interviewing Key Personnel
  - Evaluation of Security at Offsite Facility
  - Reviewing Alternative Processing Contract
  - Reviewing Insurance Coverage
- 2.14 Case Studies (2 pg)



# Chapter 2 Challenges

- Specific issues raised by participants



# Questions and Answers

- Which questions did the participants cover in the week?
- Which ones did you get wrong, lets discuss





# Prep for Week 2 of Chap2

## (7/4/2015)

- What you need to do
- Revise (or read/finish) Chapter 2
- Make notes of things you don't quite understand
- Do the sample questions
- Flag those you get wrong, even if you know why you got them wrong
- Arrive on time (4:45pm Tuesday 7/4/2015)
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# Questions and Contacts

## Questions ?

Justin Williams

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Copies of slides :

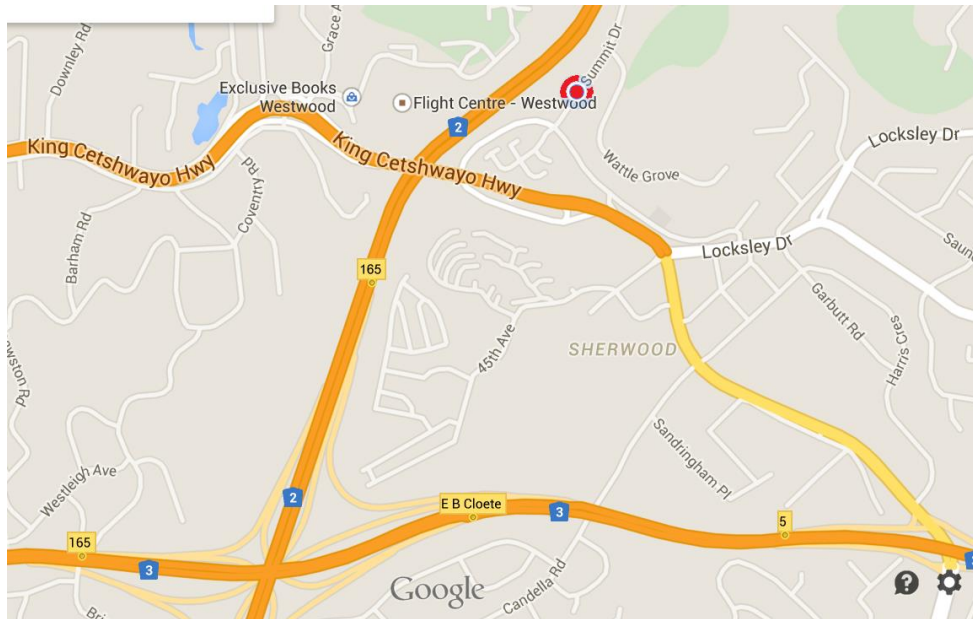
[www.j-j.co.za](http://www.j-j.co.za)

[www.itsec.org.za](http://www.itsec.org.za)



# Location of ITSec

Forest Office 6  
15 Summit Drive  
Sherwood  
Durban



# Extra material

## **Study Materials**

ISACA has prepared a variety of study resources in various languages to fully prepare for your CISA Exam. These include primary references, publications, articles, the ISACA Journal and other links.

## **Online Learning**

ISACA eLearning Campus offers a variety of online learning courses for certification exam preparation and continuing professional education.

## **Review Courses**

ISACA chapters in numerous countries offer CISA Review courses. View the Review Course list to determine if there is a course in your area, or contact your local chapter for additional courses. There will be courses in Durban, CapeTown & Jhb if demand exists.

## **Exam Preparation Community**

ISACA created the CISA exam preparation community as a place for current CISA exam registrants to collaborate and study with other registrants within the ISACA environment.

## **Free online CISA Course**

Cybrary has just launched a CISA online course, its free <http://www.cybrary.it/>



# CISA Practice Tests (free)

One of the free resources that we make available at AuditScripts.com is a database of free ISACA CISA exam questions. Many auditors use the CISA as a way to validate their information systems audit skills. Many consider the CISA certification an entry point or requirement for anyone in the IS audit field. Because so many people in the AuditScripts community value this certification we created a database of 900 exam questions to help students prepare for the exam. We hope that these questions will help students properly prepare for the exam.

CISA Exam Prep Questions – Chapter #1 (100 Questions Available)

CISA Exam Prep Questions – Chapter #2 (150 Questions Available)

CISA Exam Prep Questions – Chapter #3 (250 Questions Available)

CISA Exam Prep Questions – Chapter #4 (150 Questions Available)

CISA Exam Prep Questions – Chapter #5 (250 Questions Available)

CISA Exam Prep Questions – Complete Exam (900 Questions Available)

<http://www.auditscripts.com/free-resources/cisa-practice-tests/>

**Caution :** These are not official ISACA practice questions, use them for additional practice when you have exhausted all of the official ISACA questions you have access to

