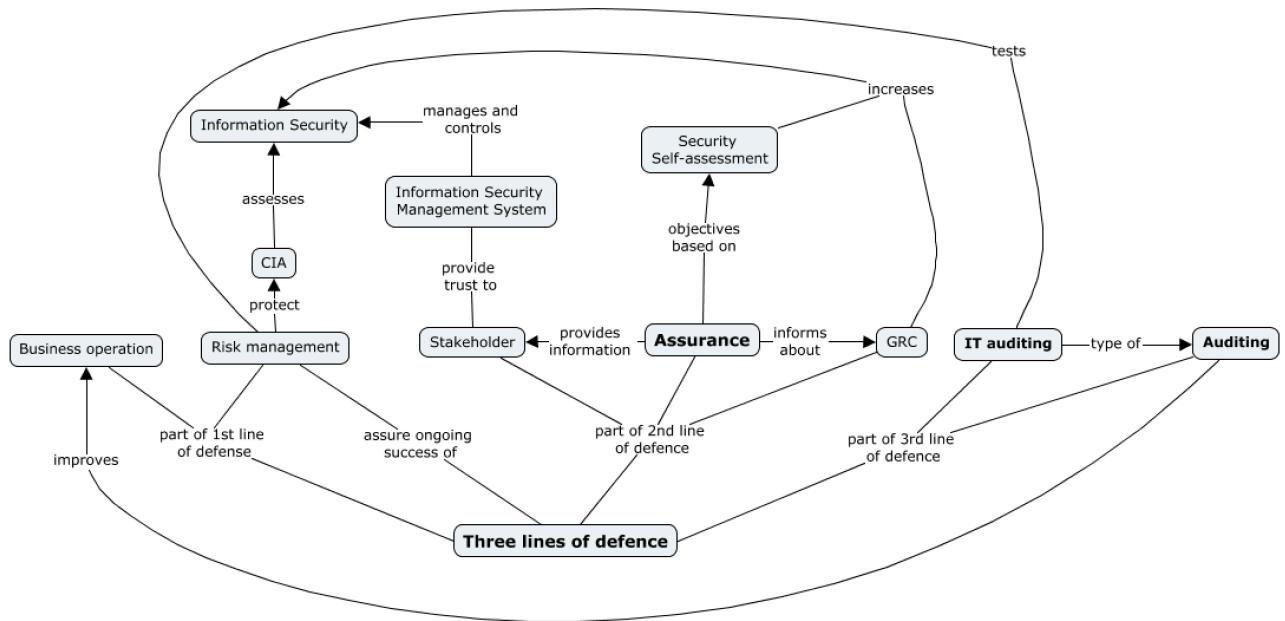


## 1 – Conceptual analysis



Concept	Definition (one sentence by concept)
Assurance	Part of corporate governance in which a management provides accurate and current information to the stakeholders about the efficiency and effectiveness of its policies and operations, and the status of its compliance with the statutory obligations.
Auditing	The process of conducting an audit, from Planning, Operation support, Performance evaluation, Improvement and Leadership
Three lines of defence	management control is the first line of defense in risk management, the various risk control and compliance over- sight functions established by management are the second line of defense, and independent assurance is the third.
IT auditing	Examination of the management controls within an Information Technology Infrastructure and the review and evaluation of such information systems.
CIA (Information Security Triad)	Triad that constitutes one of main pillars of knowledge about Information Security. The three letters stand for confidentiality, integrity and availability. Management-wise this is used as a model to evaluate the information security of an organization.
Information Security Management System	It describes and demonstrates the organization's approach to Information Security.
GRC	Governance, Risk Management and Compliance - "the integrated collection of capabilities that enable an organization to reliably achieve objectives, address uncertainty and act with integrity."
Stakeholder	Any individual, group that has an interest in any decision or activity of an organization.
Information Security	Protecting the privacy of the information that an organization has stored on others (clients, employees, etc.).
Risk management	The organisation's system identification, prevention, mitigation and recovery from potential risk in business processes.
Security Self-assessment	Self-assessments provide a method for agency officials to determine the current status of their information security programs and, where necessary, establish a target for improvement
Business Operation	A systematic effort by business management to compare performance to predetermined standards, plans, or objectives in order to determine whether performance is in line with these standards and presumably in order to take any remedial action required

## 2 – Description of the analysis

In this concept map the main central concepts the three lines of defence and their constituents.

First and foremost, the **first line of defence** is composed by where risk ownership and management. Where the **Business operations** and **Risk management** take place.

In the **second line of defence**, is where the activities from the first line are checked and challenged, by **Risk** oversight of **Stakeholders** and understanding the **Compliance**, and definition of policies according to the **Governance**. This is also where **Assurance** takes place as an opinion on compliance to policies and regulations and **Standards**.

In the **third line of defence**, Internal and external **IT auditing** resides as well as processes conducted by the BoD (Board of Directors). In this context, other types of **auditing** can be part of the third line of defence as a means to test the first two.

These lines of defence exist in order to increase **Information Security**. By means of **Risk Management** through the protection of confidentiality, integrity and availability of data (**CIA**), **Security self-assessments** and the use of **Information security management systems**. These provide trust to the **Stakeholders**.

## 3 – Research

The Enron Scandal is an example of a case where Mark-to-market approach is used to obfuscate information from auditors. Using projected revenues without reporting the losses of the corporation. Paying their investors with common stock. Meanwhile auditors questioned the transparency of the companies reporting.

As the true reality of the situation was uncovered, a financial scandal arose. Demonstrating millions of dollars in losses and debt. The collapse of this enterprise led to the Sarbanes-Oxley Act, a regulation that made disclosure more transparent and its wrong reporting more expensive in fines. As well as making the BoD (Board of Directors) more independent of the companies, in order to raise its conduct standards.

The case described is a financial fraud and exemplifies the consequences of non-compliance with regulation. As well as the importance of the audits.

In the case of an IT, many problems can arise the want for misreporting of potential accidents, such as information breaches. And so, the role of an IT auditor is crucial to evaluate the information systems and practices as well as risk management (and thus completing the last line of defence).

In today's context, the scope of an IT auditor should encompass not only the IT processes but the business applications and processes as well. In order to mitigate the fraudulent reporting of information, the IT infrastructure, management and practices must be evaluated to make sure the proper functioning of the technology and the required interaction with it. Taking this into account, the business applications must be included in the scope because people are a weak link as well. Applications of the technology may not be in accordance with regulation. So, the IT auditors must assess the business applications as well.

In companies all business processes should be aligned and supported by the information systems (IS) applications. If business processes are supported by IS, then IS 's role in the firm is being accomplished, by contributing to the real value creation of the business. When business processes are partially supported by IS, as in the case of Enron, which only financial registrations were in compliance, but not other processes like reporting non-financial information (e.g. compliance reporting, and integrated reporting assurance) cases of fraud may arise.

## 4 – Topic for discussion

How do external Auditors interact with internal IT auditors in order to assure congruence in their assessment?