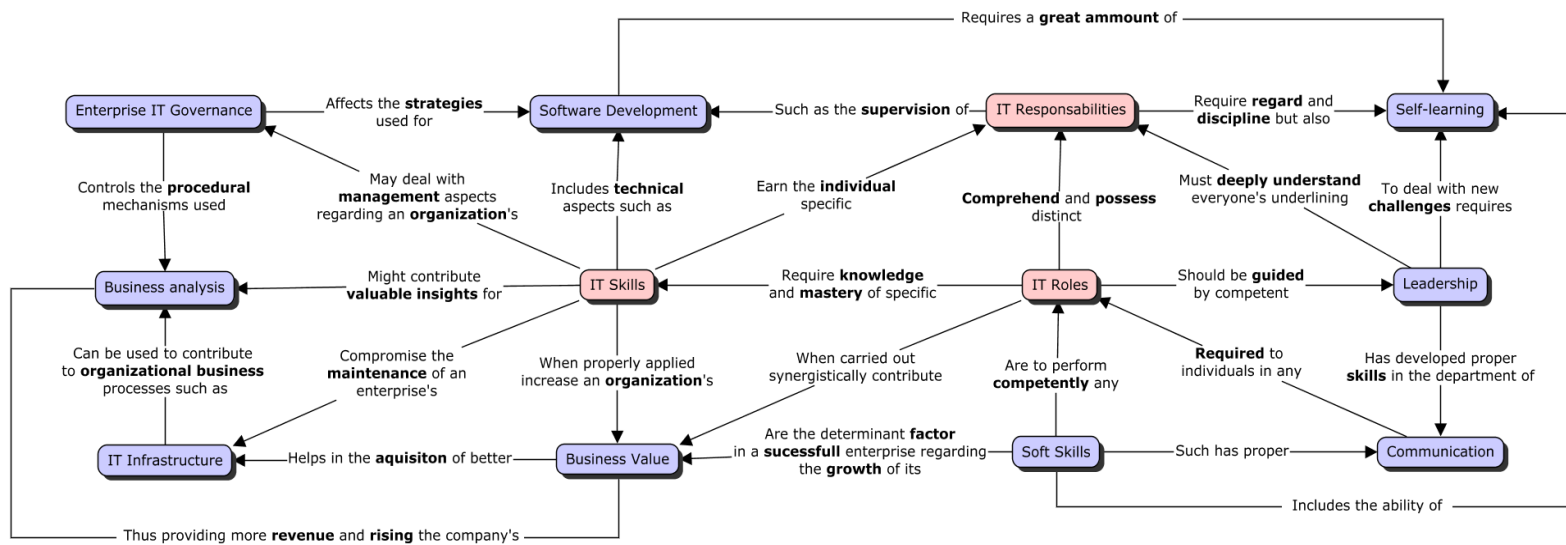


1 – Conceptual analysis



Concept	Definition (one sentence by concept)
Business Analysis	The methodical investigation of all or part of a business in terms of business goals , functions and processes , the information used and the data on which the information is based.
Business Value	Concept encompassing all elements that determine the well-being and health of a business , such as financial assets , trademarks , and brand recognition .
Communication	The act of transferring information from one place, person , or group to another.
Enterprise IT Governance	The establishment and oversight of an organization's approach to the use of Information systems and digital services , and associated technology , in line with overall organizational corporate governance requirements.
IT Infrastructure	The operation and control of the IT infrastructure (comprising physical or virtual hardware , software , network services and data storage) that is required to deliver and support the information systems needs of a business .
IT Responsibilities	A commitment or expectation to perform certain actions regarding Information Technology when specific situations arise.
IT Roles	Set of connected behaviours and obligations as conceptualized by individuals in the area of Information Technology .
IT Skill	A skill is the ability to perform an action with determined results often within a given amount of time in the domain of Information Technology .
Leadership	Process of social influence which maximizes efforts of others towards achievement of a goal .
Self-Learning	Is the process of a person to educate oneself without the guidance of masters such as such as teachers or institutions .
Soft Skills	Skills we use to communicate and interact with each other , both verbally and non-verbally , through gestures , body language and our personal appearance.
Software Development	The planning , designing , creation , amending , verification , testing and documentation of new and amended software components to deliver agreed value to stakeholders.

2 – Description of the analysis

With this concept map we intend on delving deeper into the following topics:

- **IT Skills** are crucial for modern-day enterprises since **Information Technology** has become the main vehicle for **corporations** to conduct their businesses. Highly specialized **personnel** must be hired to perform **IT roles** which include **software development** and the **maintenance** of a company's **IT Infrastructure** as their set of **IT responsibilities**.
- The successful **execution** of these **IT skills** generates **business value** for the **organization** since these **tasks** are to be aligned with the enterprise's **goals** and **objectives**, as defined by **IT governance** and **business analysis** procedures conducted to help **organizations'** thrive against their **competition**.
- Furthermore, the **IT skills** utilized by specialized personnel to add value to an **organization's business** must be complemented by **Soft skills**. Moreover, the mastery of **Soft skills**, should be as crucial to a company's employees, as the proficiency regarding the **technical knowledge** they possess.
- **Soft Skills** such as **Leadership**, the ability to **Self-learn** and good **interpersonal communication**, as well the presence of high **emotional intelligence** in individuals enhance an organization **productivity, creativity** and **efficiency**, as such these skills that are being sought after in [modern large scale companies](#).

Finally, one can observe that the main concept **interlinking** the remaining ones is that of **IT Skills**. These technical capabilities are the reason individuals are hired to perform specific **IT Roles** with a **high amount** of **responsibility**, since **software development** and **IT infrastructure maintenance** when aligned with the goals of **IT Governance** add business value to an **organization**. Nonetheless for a company to truly thrive in a competitive environment, its personnel must possess an high proficiency in the **soft skills** department since the mastery of communication, the capacity to **self-learn** and the will to **lead** are highly important for an **IT organization's** success.

3 – Research

Having in mind that our specializations are **Distributed Systems, Cyber Security and Business Systems** the skills we learn in university are the following:

1. **Security skills** - These are becoming more relevant nowadays due to rising **concerns** regarding **data privacy** and **information security** nonetheless these skills should be applied throughout the software development cycle (included in the Cyber Security Masters and Information Security skill in **SFIA**).
2. **IT Management Skills** - are important for project management and to achieve **business goals** efficiently and with efficacy (included in the Business Systems Masters. In **SFIA** the related skills are IT Management skills and Knowledge Management).
3. **Distributed Computing Skills** - very relevant in the context of **data management** and **cloud skills** that enable a hybrid cloud architecture that brings value to a business (these skills are included in the Distributed Systems Masters. In **SFIA** the related skills are Network planning and Network design).

Skills we do **not** learn in our specific master's areas (**Distributed Systems, Cyber Security and Business Systems**):

1. **Data and analytics skills** - Important skills because of the ambition to **analyze large volumes** of **enterprise data** by organizations (these skills are included in the scope of the Data Science Masters however we are not in this scientific area. In **SFIA** this matches the Data modelling and design and Data management skill).
2. **Communication and Leadership Skills** - These are in demand because they are crucial to a good work environment and enable **teamwork** and **motivation** in IT. Even though we do not learn these skills in any class, the Portfolio course aims to improve and aid students' **communication skills** (regarding **SFIA** the responsibilities levels 6 and 7 are related to leadership and communication).
3. **Specific Enterprise Technology Skills** - These are often used by enterprises and require specific training. Examples of these **technologies** include SAP and other **proprietary software** that employees can learn while working inside the companies (the related skills in **SFIA** are Teaching and subject formation and Learning delivery).

4 – Topic for discussion

New and innovative **technologies** (such as **blockchain**) can bring **value** and **differentiation** to companies.

- Should companies invest more on providing **training** to its own **employees** and thus making sure this knowledge is **directly applicable** to their business or should they **talent seek** individuals already with those skills? And how should they **balance** these approaches?