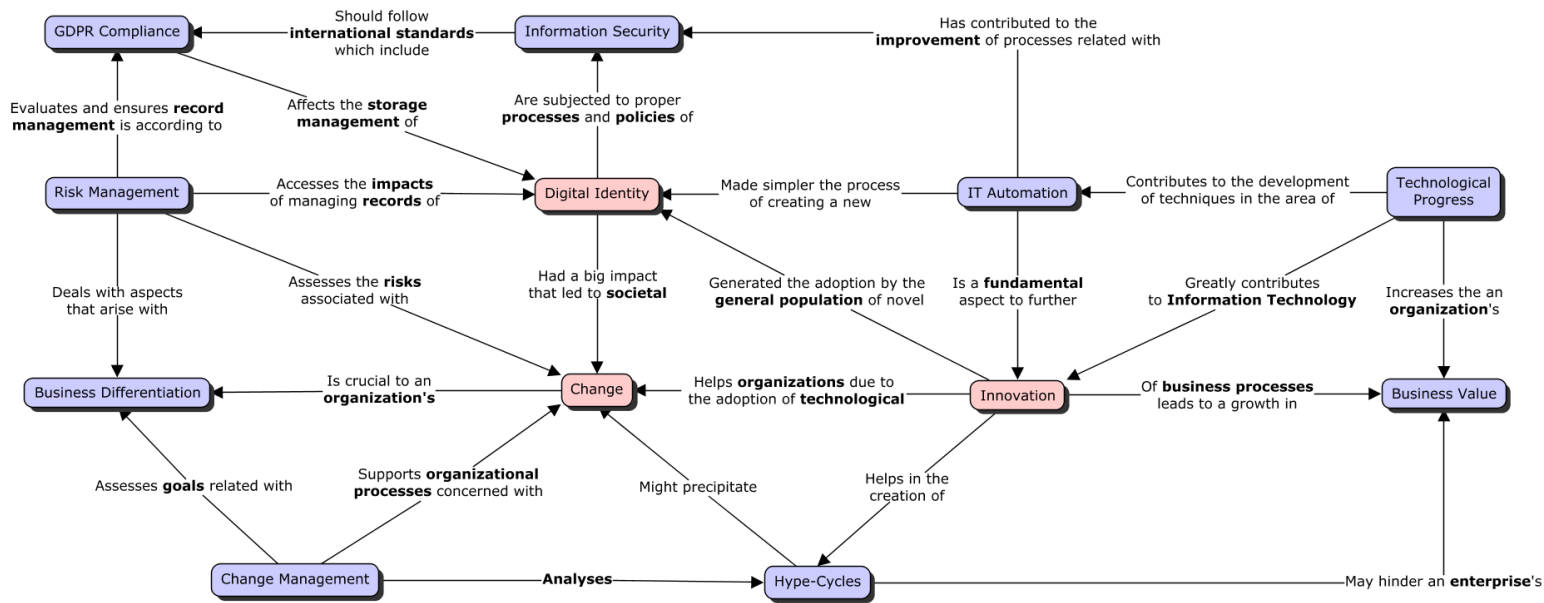


1 – Conceptual analysis



| Concept | Definition (one sentence by concept) |
|---------------------------------|---|
| Business Differentiation | The process of distinguishing a product or service from others, in order to make it more attractive to a target market . |
| Business Value | Concept encompassing all elements that determine the well-being and health of a business , such as financial assets , trademarks , and brand recognition . |
| Change | Method of changing an organization's processes, strategies, culture, and technologies , as well as the effect of those changes on the given organization . |
| Change Management | Collective term for procedures based on the assessment , preparation , support , and review to help individuals , teams , and organizations producing organizational change . |
| Digital Identity | Set of attributes related to an entity used in IT systems to represent a person , organization , system , or application . |
| GDPR Compliance | Is the act of complying to GDPR - a regulation that requires businesses to protect the personal data and privacy of EU citizens for transactions that occur within its member states. |
| Hype-Cycle | Provide a graphic representation of the maturity and adoption of technologies and applications , and how they are potentially relevant to solving real business problems and exploiting new opportunities . |
| Information Security | Practice of preventing unauthorized access , use , disclosure , disruption , modification , inspection , recording or destruction of information . |
| Innovation | Organization's process focused on the introduction of new ideas, workflows , methodologies , services , and products . |
| IT Automation | Process of utilizing software to create repeatable instructions and processes to replace or reduce human interaction with IT systems . |
| Risk Management | Identification , evaluation , and prioritization of risks followed by coordinated organizational actions to minimize and control the probability of harmful events affecting the organization . |
| Technological Progress | Introduction of new and improved methods of developing products leading to an increase in productivity of labour , capital , and other business factors . |

2 – Description of the analysis

With this concept map we plan on expanding upon the following points:

- **Innovation**, being the result of **Technological Progress**, is the main **catalyst** for **Change** in the **Information Technology** and landscape of modern-day **organizations**, leading to the **implementation** of new **automation** practices and **innovative techniques** which contribute to an enterprise's **business success**.
- Furthermore, **Changes** lead **organizations** to effectively deal with **novel business challenges**, thus allowing for the **differentiation** against the **competition** in the way **commercial obstacles** are tackled and new **solutions** are offered, leading to the **growth** of one's **business value**.
- Moreover, **efficient implementation** of technological **change** is a subject that should be **meticulously undertaken**. These **change-acceleration procedures** are conducted according to **change management policies**, that look forward on effectively implementing change of **information technology processes** and ensure these are not **conducted solely** following the **hype** of **potential technological innovation**.
- Additionally, we would like to acknowledge the **rise** and **popularity** of **Digital Identities** in modern-day **society**. In an ever-changing world where nowadays every **citizen**, **family** and **organization** look on **developing** their **online identities**, enterprises that **store** and **manage** personal data must apply **information security procedures** and **risk management strategies** to comply with the **growth** of **data protection policies** being implemented by national entities.

Concluding, one can observe that the main concepts interlinking the remainder are those of **Innovation** and **Change**. Through the **progress** and **automation** of **Information Technology**, **innovation** will arise, leading to **changes** in the adoption of **digital identities** by everyone around the world and in the **conduction** and **differentiation** of **business** by organization which leads to an increase not only in **business value**, but in the **risks** that come associated with **managing** and **securing customer's data**.

3 – Research

Having in mind the **present** moment in which many people need to practice **social-distancing** and thus **remain home**, and after studying the scenarios below, we came up with four distinct **recommendations** for a national **government** to improve its **public services**:

| | |
|---|--|
| <p><i>Low growth, managed transition</i></p> <ul style="list-style-type: none"> • Hospitals can be provided with automated, intelligent machines that substitute jobs. • Government should still support workers in transitioning to a more specialized role (such as dealing with the current outbreak). • This way, costs are reduced. | <p><i>Tech for better lives</i></p> <ul style="list-style-type: none"> • Hospitals can be provided with intelligent machines that complement the health professionals' work (don't substitute it). • Innovation is supported, potentially boosting welfare and GDP. • Ideal Scenario. |
| <p><i>Low growth, low welfare</i></p> <ul style="list-style-type: none"> • Decreasing elementary, middle, high school, and university teachers' work hours by half. • As a substitution of the lost hours, the correspondent students will be faced with change in their study method, being provided with e-learning platforms (such as Google Classrooms or Kahoot). • This way, costs are reduced. | <p><i>High growth, low welfare</i></p> <ul style="list-style-type: none"> • Remote communication can be used (tools such as Zoom or Microsoft Teams), both in education and in business, where user's digital identity is used to log in. • This can lead to extra productivity and growth, given possible extra hours of work. • Innovation is supported, but welfare can be prejudiced due to increased stress. |

After analysing all the different scenarios, we can observe that "Low growth" ones tend to **reduce** costs and **substitute** labour, while "High Growth" ones tend to focus on **innovating** and **augmenting**. On another hand, the "Low welfare" scenarios tend to have a **reactive** management of transition, while the remaining are more **proactive**.

4 – Topic for discussion

We would like to have a better understanding of the **impact** that an **innovative technology** such as **Machine Learning** can have in an organization and how it can help that organization **grow** (such as improving its **sales** thus helping the organization **earning** and **saving** more money).