ICT and business digitalisation

MODULE 4

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This module will introduce some of the trends that can be found in digital business, as well as some ways to use the artificial intelligence in business. Furthermore, in the module can be found best practices in management and some resources to be used in entrepreneurship.

The module is made for women learning about the trends in business, about how to apply artificial intelligence in business, and about best practices in management and in entrepreneurial resources.

ICT AND BUSINESS DIGITALIZATION

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WHY IS THE TOPIC IMPORTANT?

ICT and business digitalization is a topic of great importance when talking about entrepreneurship since it is impossible to imagine carrying out a business without the Internet access, apps which facilitate management, communication tools, or video conferences among others, especially in the post-pandemic era. Additionally, one cannot forget about tools such as Instagram which are extremely powerful when it comes to reaching wide audiences (especially Generation Z) through advertising one's business there. Moreover, we can go one step further to conclude that the role that the technology plays will only gain on significance.

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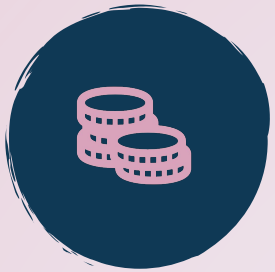
Topics

Current Trends in Digital Business



Artificial Intelligence in Modern Business

ICT Management Best Practices

Entrepreneurial Resources and Networks

Time to practise!

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Current Trends in Digital Business

One of the current trends is to use social networking sites for marketing purposes, especially if one's target group include young people. The Global State of Digital 2022 report proves that users who are between 16 and 24 years old tend to prefer Instagram. Let's take a look at **Instagram.**

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Current Trends in Digital Business

The recent trend on Instagram is the use of the so-called **"Reels"** which are videos of 6o seconds or less. Digital Agency Network states: "Consistently posting high-quality and relevant reels that target your niche is a great tactic to attract your desired audience via Instagram's recommended feed content and users' personalized explore page."

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Another useful feature is called **"Carousels"** which enables you to add up to 10 photos in one post and, as a consequence, the viewers look at the particular post for longer. Thus, carousels ensure a higher rate of engagement.

Current Trends in Digital Business

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Case Study

Portland Cider Company used Instagram for 13 days to see if publishing content on Instagram can attract new clients. As a result of spending $150 on advertisements, they claim that they could notice:

- 50 percent increase in impressions;
- a 42 percent increase in reach;
- and a 54 percent increase in engagement.

Current Trends in Digital Business

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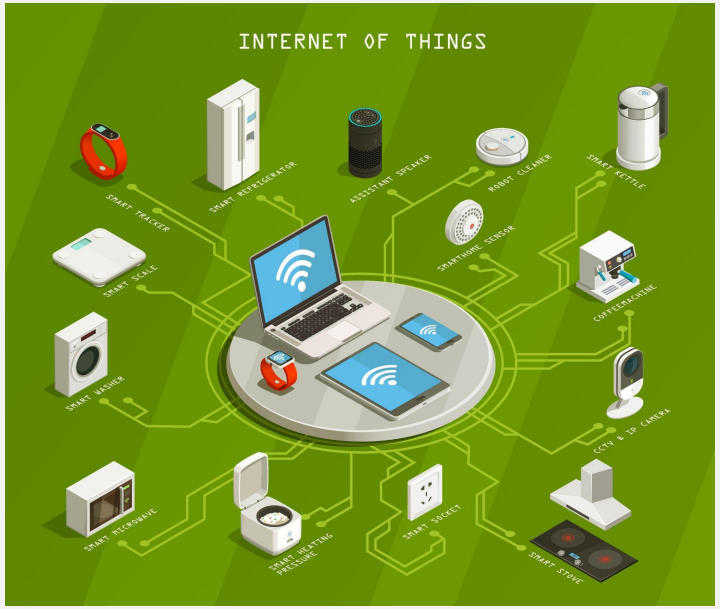
Current Trends in Digital Business

Another trend is the concept called: **"Internet of Things (IoT)**." It refers to the digital interconnection of daily objects with the Internet. It is the most important component within Digital Transformation because it allows, drives and accelerates opportunities for business creation or change and improvements in ways to work or live and unite the "physical world" with the "virtual world".



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Current Trends in Digital Business

There is also the concept called "**Internet of behavior:"** It refers to the use of data to change behavior. Information that can be used to influence behaviors through feedback loops. IoB can collect, combine and process data from many sources, including: customer business data; social media; public domain face recognition deployments; and even location tracking. The increasing sophistication of the technology that processes this data has allowed this trend to grow. IoB has ethical and social implications according to the objectives and results of individual uses.

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Current Trends in Digital Business

Personalized digital experiences: Data-driven personalization strategies have positioned themselves as a priority for companies looking to reach out directly and connect with their users effectively.

Omnichannel and digital multichannel: Diversifying digital channels is a great advantage for customers who want to be served how and where they want.

Data Driven: Organizations are investing in data analytics to transform their customers' experiences, improve efficiency and identify new business opportunities. But the value of data analysis will depend on the data provided to them and on professionals who really know how to manage with data.

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Current Trends in Digital Business

Automation will be developed to drive operational excellence and improve both commercial and product processes. The acceleration of the robotic ecosystem is imminent and reversible. The deployment of robots has multiplied in market leaders by the relationship between IoT devices and 5G networks that facilitate their use.

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Distributed Cloud: Distributed cloud is where cloud services are distributed to different physical locations, but operation, governance and evolution remain the responsibility of the public cloud provider. Allowing organizations to have these services physically closer helps in low latency scenarios, reduces data costs, and helps to accommodate laws that dictate that data should remain in a specific geographic area.

Current Trends in Digital Business

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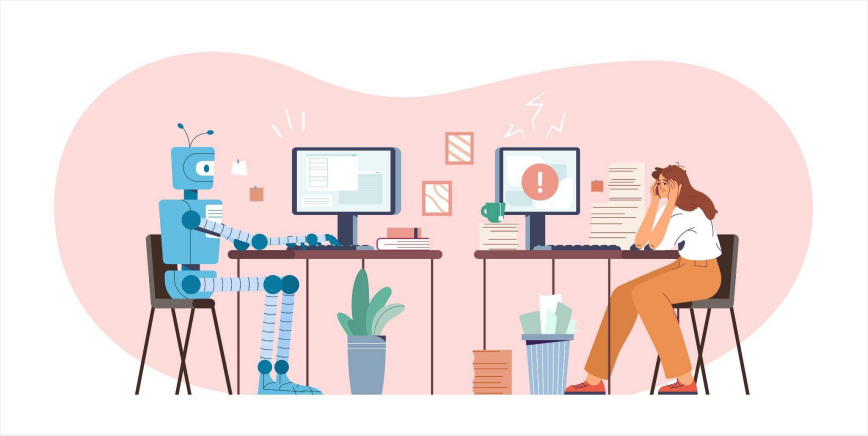
Application of artificial intelligence in business

Artificial intelligence is the use of technologies that make it possible for a machine or software to behave similarly to human intelligence.

It is a part of computing that helps develop programs that can learn, reason and understand as if they were humans.



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Application of artificial intelligence in business

It can be used for:

- Streamlines the staff selection process: AI tools can reduce the time that HR employees spend selecting resumes, allowing more focused time for candidates who fit the company's job qualifications or needs.

- Boosts cybersecurity: The increase in digital information, from customers and companies means greater digital security. Cybersecurity AI works by reviewing behavior patterns in a company's software, applications, and stored information

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Application of artificial intelligence in business

It can be used for:

- Modernizes the network: Technologies powered by Artificial Intelligence will help IT teams better protect networks. AI, using machine learning techniques, can find bugs in the network and correct them as needed.

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ICT Management Best Practices

1. Use a Framework/ITSM Software

One of the most basic IT service management best practices is to have some kind of framework for delivering IT services. This can help organizations make more effective and efficient use of IT resources and minimize the risk of confusion between business units.

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2. Have Clear Goals

Having clear goals for IT is a crucial part of effective IT management. Whether a company is using managed services from a third-party vendor or internal IT staff and resources, having specific goals helps inform the company's approach to IT.

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3. Use the Right Metrics

Performance metrics are a key part of how businesses can track the effectiveness of specific initiatives. Using the right metrics helps ensure that the organization can accurately track progress towards their most important goals.

However, the "right" metrics for a business might vary depending on the goals it pursues. Some examples of useful categories of metrics for IT initiatives include:

- Cost Metrics. How much is the organization spending on IT? What is their cost-per-ticket for resolving service issues? How much labor time is saved after initializing a specific IT solution?

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3. Use the Right Metrics

Some examples of useful categories of metrics for IT initiatives include:

- Productivity Metrics. How many tasks are employees completing per day/week/month? How often are employees collaborating on projects? How much time are employees spending on non-critical tasks before and after an IT initiative?
- Service Level Metrics. How quickly are service tickets being resolved? What's the uptime for customer-facing IT products? What percentage of the time are service level agreements (SLAs) being met?

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3. Use the Right Metrics

The usefulness of these metrics may vary depending on the organization. For example, a business that offers a "service desk" for other businesses might want to focus on service level metrics like the percentage of calls closed successfully or average time to resolution. Enterprises looking to reduce costs will, naturally, focus on cost-related metrics.

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ICT Management Best Practices

4. Have the Best IT Security

Following IT security best practices is crucial for protecting the "estate" of the organization. Modern IT solutions have brought a lot of conveniences, but they have also introduced new risks in the form of cybercrime.

For example, companies have to contend with:

- Malware and Viruses. Programs that can have a variety of effects on a computer system ranging from rendering files unreadable, to passively stealing information, consuming system resources, running malicious programs for other cyberattacks, and more.

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4. Have the Best IT Security

For example, companies have to contend with:

- Phishing Attacks. A type of fraud where a criminal sends a fake message posing as someone else to trick their victim into taking some kind of action (such as paying a fake invoice, giving up user login information, or surrendering sensitive data).
- International or Corporate Espionage. Foreign agents may try to steal the data of businesses with valuable intellectual property (IP) or connections to government agencies.

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ICT Management Best Practices

4. Have the Best IT Security

For example, companies have to contend with:

- DDoS Attacks. Distributed denial-of-service (DDoS) attacks aim to disrupt an organization's ability to deliver services by overloading their systems. These attacks often rely on botnets created through the installation of malware on other systems.

Because of threats like these, having the best possible IT security (cybersecurity) is a must for modern businesses. Strong cybersecurity protections help to minimize the risk of a data security breach or data loss events caused by cyberattacks.

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5. Make Customer Success Operations a Top Priority

For any business, customer success should always be a priority. While the definition of customer success may vary from one business model to the next, helping customers meet their goals can help a company drive long-term success and stability.

A company that has a track record of helping customers meet their goals will have an easier time selling its services to new customers—making meeting sales goals simpler.

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ICT Management Best Practices

5. Make Customer Success Operations a Top Priority

So, crafting IT initiatives with an eye towards how they'll help customers meet their own goals—whether by optimizing their user experience, helping create efficiencies for them, or controlling some risk factor for them—is an important IT management best practice.

This applies even for companies that aren't dealing in IT service management. For example, a company could adopt a new software that makes its own supply chain management more efficient so that its customers can get more reliable access to goods and services.

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Entrepreneurial Resources and Networks

Business networks are a kind of partnership and integration with which you can achieve common goals, and achieve better economic, technological, development, training, production and knowledge generation results.

The characteristics are:

- Collaboration, the success of one depends on the others and the results need the contest of all.
- Interdependence, since individual autonomy is maintained, but we work within the framework of commitments with other entrepreneurs.
- Coordination, needs organization of efforts, clarity of tasks.
- Demand and market orientation: There must be a market (consumer)

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Entrepreneurial Resources and Networks

The characteristics are:

- Orientation to the entrepreneur: accept a project and be willing to operate it with investment of time and own resources.
- Business orientation: The project must be a profitable business

Orientation to generate permanent changes in the productive structure of the entrepreneur: projects must generate adjustments.

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Entrepreneurial Resources and Networks

Companies that are part of a network can carry out related or complementary activities. In this perspective, there are various types of networks:

- Global networks: Formed by interrelated nodes operating from different geographical locations and therefore not influenced by the conditions of a specific environment (support institutions, scientific and technological infrastructure, specialized labor market, lower transaction costs, among others).

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Entrepreneurial Resources and Networks

In this perspective, there are various types of networks:

- Local networks: They are those that operate in a defined geographical space (locality), where the members interact with each other through relationships that can be vertical, horizontal or both, generate a favorable environment (technological innovation and development, knowledge flows, exchange of services and information, etc.)

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Entrepreneurial Resources and Networks

In this perspective, there are various types of networks:

- Vertical networks: In vertical networks, companies are at consecutive points in the chain, which means they maintain supplier-buyer relationships, complement each other, one does something the other may need or demand.

- Horizontal networks are constituted as follows: They are formed by companies that do something similar, when they have a common product, there are cases in which these networks bring together direct competitors.

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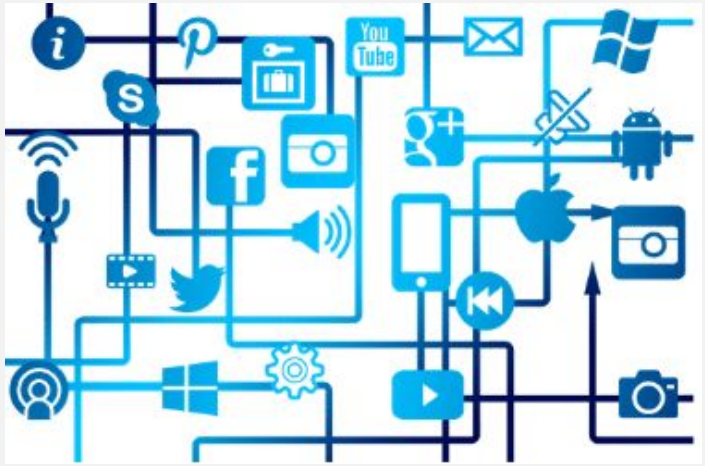
To sum up, horizontal networks are a way of achieving economies of scale and improving the bargaining power of companies.

It is easier to form networks with companies that complement each other and do not compete with each other.



Entrepreneurial Resources and Networks

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Let's practise!

1) What is IoT?
   a) A digital interconnection between daily life
   b) A link between the "physical world" and "digital world"
   c) All of them are correct
2) Why is it important to have a good IT security?
   a) To prevent phishing
   b) To prevent malware
   c) All of them are correct
3) Can artificial intelligence be applied in business?
   a) Yes
   b) No
4) Companies can be in how many types of networks?
   a) Global and local networks
   b) Vertical and horizontal networks
   c) All of them

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Let's practise!

5) Activity

Think about your company and about the ways in which you could promote it via social networking sites. Download Instagram and create an entertaining reel to improve the visibility of your brand as well as to reach wide audiences.

Check out the recent Instagram trends going to the following link https://later.com/blog/instagram-reels-trends/ , get inspired, and have fun while creating a content for your business.

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Further reading

Forbes. *Top 10 Digital Transformation Trends for 2022.* https://www.forbes.com/sites/danielnewman/2021/10/13/top-10-digital-transformation-trends-for-2022/?sh=c561e6263307

Harvard. *Business Applications for Artificial Intelligence: An Update for 2020.* https://professional.dce.harvard.edu/blog/business-applications-for-artificial-intelligence-an-update-for-2020/

Upwork. *What Is IT Security? Examples and Best Practices for 2022*. https://www.upwork.com/resources/it-security

SAP. *What can SAP Business Network do for your business?* https://www.sap.com/products/business-network.html

Help Scout. *Customer Success: What It Means, Why It Matters, and More.* https://www.helpscout.com/helpu/customer-success/

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WE GET project n. 2020-1-NL01-KA204-064559

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REFERENCES

Jametlene Reskp. https://unsplash.com/photos/3Dtu6_XfqIk

Krakenimages. https://unsplash.com/es/fotos/376KN_ISplE

KWSM. *Case Study: Using Instagram to Connect with Your Target Audience*. https://kwsmdigital.com/case-study-using-instagram-to-connect-with-your-target-audience/

Lukas. https://www.pexels.com/es-es/foto/persona-senalando-el-grafico-de-lineas-de-papel-590041/

Macrovector. *Diagrama de flujo isométrico de internet de las cosas*. https://www.freepik.es/vector-gratis/diagrama-flujo-isometrico-internet-cosas_6169717.htm#query=internet%20of%20things&position=9&from_view=search

Macrovector. Concepto isométrico de desarrollo de interfaz de usuario con una mujer joven que crea un diseño personalizado para la aplicación móvil. https://www.freepik.es/vector-gratis/concepto-isometrico-desarrollo-interfaz-usuario-mujer-joven-que-crea-diseno-personalizado-ilustracion-vector-aplicacion-movil_26764326.htm#query=personalized%20digital%20experiences&position=0&from_view=search

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REFERENCES

McLachlan, Stacey. *Instagram Demographics in 2022: Most Important User Stats for Marketers*.

https://blog.hootsuite.com/instagram-demographics/

Redgreystock. *Robot vs ilustración de vector plano humano. Máquina robótica y mujer cansada que trabaja en la computadora en la oficina.*

https://www.freepik.es/vector-gratis/robot-vs-ilustracion-vector-plano-humano-maquina-robotica-mujer-cansada-que-trabaja-computadora-oficina-humanoide-versus-persona-empleado-desafiante-inteligencia-artificial-tecnologia-ia-moderna_16503947.htm#query=artificial%20intelligence%20in%20business&position=1&from_view=search

Seibert, Leon . https://unsplash.com/es/fotos/2m71l9fA6mg

ThemYou&Me. *TOP 5 REASONS WHY TECHNOLOGY IS IMPORTANT IN BUSINESS.*

https://themyouandme.com/blog/top-5-reasons-why-technology-is-important-in-business/

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