

## Transformação digital: práticas, desafios e soluções Digital transformation: practices, challenges and solutions

# IX JORNADAS DE SECRETARIADO E ASSESSORIA

# The future is now. The impact of digital transformation on business models and corporate communication

Fábio Canário<sup>1</sup>, Rita Barbosa<sup>1</sup>, Anabela Simões<sup>1,2</sup>

- <sup>1</sup> Higher School of Technology and Management of Águeda, University of Aveiro
- <sup>2</sup> Languages, Literatures and Cultures Research Center, University of Aveiro

#### **Abstract**

We are living in a world of rapid evolving technologies that are fusing the physical, digital and biological worlds and impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human (WEF, n.d.). Amidst the so-called 4<sup>th</sup> industrial revolution, every company's success is now more than ever dependent on its capacity to adjust to this new era and make smart investments in the future. The aim of the present work is to demonstrate how Digital Transformation (DT) plays a key role in that process, shaping today's business models, customer relationship and even the way we communicate. To accomplish that goal, examples of DT from Amazon, Santander and Emel shall be explored in order to illustrate this trend and showcase how these organizations in particular are progressing along the digital maturity path.

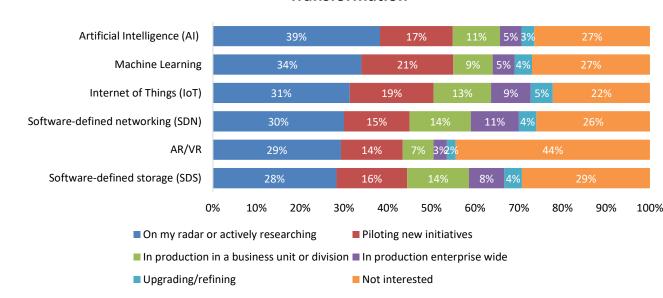
#### Keywords

Digital Transformation, 4<sup>th</sup> industrial revolution, GDPR, Digital Information

#### Introduction

DT is the process of creating new, or modify existing, processes and strategies within an organization, in order to make them more efficient or effective by leveraging current technologies. As seen in Fig.1, DT can involve numerous technologies, with the most popular of 2018 being Artificial Intelligence (AI), Machine Learning and Internet of things (IoT), (Salesforce, n.d.).

#### AI & Machine Learning Tools Being Eyed to Drive Digital



**Fig.1** Top 6 tools being eyed to drive DT according to a 2018 Business Survey (adapted)
Source: IDG Communications,Inc.

With some of the largest players in the business world investing heavily on DT, and with more than 55% of startups having already adopted DT strategies, its importance cannot be understated (Tedikov, n.d.).



According to Rouse (2017), the major advantages of DT are:

- a more engaged and motivated workplace;
- easier risk identification and internal processes improvement, which leads to more data-drive decisions, saves time and promotes the growth and discovery of new ideas;
- ✓ facilitated costumer access and engagement, which is invaluable to keep pace with emerging demands.

#### The arrival of new business models

#### 1. AMAZON

While mostly known for its online store, Amazon also has a strong brick and mortar presence, with dozens of stores distributed throughout the USA. However, those stores do not deviate much from the typical retail setup. This is where their partially automated "Amazon Go" stores (Fig.2) attempt to entice people with a new concept. These locations enable customers who use the "Amazon Go" app to pick any items they'd like to purchase and then simply leave without having to go through a conventional cashier. The system automatically keeps track of any collected item through special tags and a multitude of sensors placed on the ceiling area; it is even able to tell if something is returned, no matter if the item was placed in its original location or not. Like the official store website suggests, "No lines, no checkout – just grab and go", the items carried upon leaving will be added automatically and charged on the account used to get inside, with the "receipt sent directly to the app" (Amazon, n.d.<sup>1</sup>).

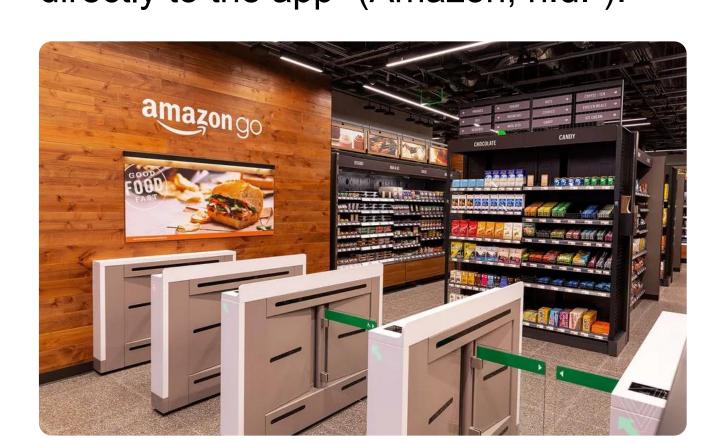


Fig.2 Amazon Go Store Entrance Source: Photo by Nick Statt (The Verge)

On a more experimental stage, there's "Amazon Prime Air". Still undergoing private trials and limited to a 16KM radius from the distribution center, it promises deliveries (of up to 2.25KG) within 30 minutes from the moment the order is placed.

Currently limited to Cambridge, in the UK, it only requires a "landing pad" about the size of a cereal box to be placed outside at the designated address and a fully automated drone will fly by and drop the package on top of it (Amazon, n.d.<sup>2</sup>).

#### 2. SANTANDER

After first experimenting with the idea in other parts of the world, the Santander Group launched its first "work-café" in Portugal, in January 2019. In these café-like spaces, besides the services that you expect from such establishments with the usual assortment of beverages and bakeries, you're also given the option to do your banking activities in a more relaxed environment. The space also offers free internet along with areas where clients can study, have business meetings or host small events (Tavares, 2019).

#### 3. EMEL

Bicycle-sharing is another innovative, technology-based business concept. The process is simple: through a phone app users can rent an electric or classic bike at any of the available stations. Convenient for both frequent and occasional short trips, it has been rising significantly in popularity in the world's largest cities (Richter, 2018). This reality has recently reached Portugal as well, with Emel's GIRA being a popular example in the capital city: in December 2018, one year after these bikes' arrival, one million rentals had been registered (Emel, 2018).

#### The impact on communication

From e-commerce platforms to mobile customer service, DT has above all facilitated and improved communication between organizations and their stakeholders. Every business that strives for success always seeks to align their strategy with consumer behavior and preferences. But this also comes with a potentially negative flipside.

In the wake of the digital age, it has never been as easy to access anyone's information. Oblivious of its dangers and unaware of the ramifications of their actions, millions of individuals donate their personal lives to large corporations directly by filling their popular social network profiles and indirectly through internet search engines.

The way advertisement is communicated changed tremendously in recent years. Ads are now tailormade for every individual. Behavior studying Als offer suggestions based on users' habits, and it doesn't take more than a visit to a popular website to receive a suggestion that a previous search is available at a retailer "nearby". Associated with technologies like Geolocating and machine translation, it also allows for ads and content to be in the user's language, even if the store has no presence in the user's country (Smith, n.d.). This phenomenon didn't go unnoticed by safety and governmental institutions, which is one of the reasons that prompted the General Data

### regulation in 20 years (EUGDPR, n.d.). Conclusions

With today's connected world, DT becomes unavoidable in order to stave off stagnation from an organization's future. Technology won't stop moving forward, thus the solutions we've developed must evolve along with it in order to better answer current and future problems.

Protection Regulation (GDPR), the

most important change in data privacy

#### References

Amazon (n.d.1). *Amazon Go.* Retrieved from https://amzn.to/2haWZhx Amazon (n.d.<sup>2</sup>). *Amazon Prime Air*. Retrieved from https://amzn.to/2hcoELg Emel (2018). Bicicletas GIRA já rolaram 1 milhão de viagens. Retrieved from https://bit.ly/30yvyBA EUGDPR (n.d.), GDPR Key Changes. Retrieved from https://bit.ly/2QNjZ7z Richter, F. (2018). The Global Rise of Bike-Sharing. Retrieved from https://bit.ly/2TwdXFT. Rouse, M. (2017). Next-gen IT infrastructure strategy to guide DT. Retrieved from https://bit.ly/2TUGIkF Salesforce. (n.d.). What is digital transformation? Retrieved from https://sforce.co/2FWf0fF Smith, J. (n.d.) Targeted advertising. Retrieved from https://bit.ly/2U5z7yN Tavares, E. (2019). Banca mexe nos balcões para atrair clientes. Retrieved from https://bit.ly/2FpMqSI Tedikov, O. (n.d.). Why it's important to have digital transformation strategies. Retrieved from https://bit.ly/2S8J7mY WEF (n.d.). The Fourth Industrial Revolution, by Klaus Schwab. Retrieved from https://bit.ly/2oqFJp9.