

E-LEARNING VS. DIGITAL LEARNING?

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Abstract: *Digital natives and digital immigrants are now the vast majority of employees and customers, hence the drivers of digital transformation can be found in societal and behavioral changes. Understanding digitalization as a powerful and transformative process able to trigger fundamental changes in corporate learning implies a high significance for related business performance indicators. This research paper explores how the digital transformation and the emergence of digital immigrants and natives are affecting corporate training as well as related business performance indicators like sales targets, overall growth or innovation. The underlying methodology is a comparative examination of how well current learning methods and technologies are fitting for the specific target groups of digital natives and immigrants. The paranthesis of this paper has therefore the aim to contrast the findings with current standards, definitions and overall perception of digital learning in order to falsify their validity in the digital age.*

Keywords: *E-Learning, Digital Learning, Digital Natives, Digital Immigrants, Digital Transformation*

1. INTRODUCTION

Ever since various forms of digitally supported learning methods emerged in the mid-nineties of the last century, the landscape of learning has changed substantially due to technological and societal developments. The term E-Learning itself was coined in order to describe learning methods supported by any kind of computer or digital technology [1]. Since the year 2000 the terminology used got widened due to the rising abundance of possibilities created by technological developments: *Distance* or *online learning* became a popular term for describing the ability to use the Worldwide Web for training and education. Massive Open Online Courses (*MOOC's*) enabled universities to offer their curriculum on a broader scale and to manage resources more efficient. *E-Testing* made it possible for corporations and institutions to handle standardized examinations in a more productive manner [2]. This few named examples are just an extract from terminology of a vividly growing but never standardized industry. But this fact itself indicates the complexity or rather difficulty to unify the various methods and technologies under one specific terminology and overall valid conceptualization. The emergence and unveiling of *mobile internet*, respective devices such as *smartphones* and *tablets* as well associated phenomena like *social media*, made it clear that underlying societal and behavioural changes have occurred and that forms of communication, learning or working are a subject of fundamental modification [3]. This development is generally described and named as digital transformation or digitalization, which refers not only to the digitalization of learning but to various spheres of society and business [4]. In order to analyse and describe how these changes are affecting corporate learning and general business

performance indicators, the following questions obtrude and shall be scrutinized in the course of this research paper: How does the digital transformation affect customers and employees? What impact has the digital transformation on corporate learning and to what degree are business performance indicators affected? How well do current learning methods and technologies fit the needs of a new generation of digitally literate employees and customers?

2. DIGITAL NATIVES AND DIGITAL IMMIGRANTS

Societal as well neurological research show that technological innovations or inventions, especially computer technology and the Internet, have a profound impact on the human brain structure as well as on societal values and social behaviour in general [5]. Such an insight indicates that the way students or trainees learn is also changing. Further the question rises if the learning subjects are transformed or does the "*what is being learned*" changes as well, since the logical recourse of innovative inventions suggests that learning content must also change. An enlightening example for this logical recourse is the fact that in undergraduate education curricula handwriting has become a far less important skill than basic computer literacy. Other examples can be found in vocational training, where the decreasing demand for antique professions like printers or tailors has been superseded by modern professions like programmers or webmasters [6].

This affected generations, typically described as *Millennials* or *Generation Y*, had been born after 1980, they grew up with computers and have been using the internet since the 1990's. Their perception of technology, society, economy but as well as their utilization has profoundly changed compared to the generations before

1980/1990 [7]. But the terminology above is not conclusive and merely an attempt of describing the societal phenomenon with a catchy phrase. Therefore gradually and over time additional, more specific terminology was coined. The Millennials can be separated into two groups, which aim to be consistent with their respective degree of digital literacy as well as their age: *Digital Immigrants* and *Digital Natives*. The first term describes the generation born in the later second half of the 20th century, who either got accustomed to digital technology as adults or grew-up with the emerging technologies during the late 1980's and 1990's [8]. Therefore *Digital Immigrants* can be described with the following attributes [9]:

- Adopting of new, especially web-based, technologies
- Obtaining information from classic sources such as news outlets and traditional newspapers, although using respective websites, newsfeeds etc.
- Preferring personal communication, e.g. talking to people in person
- Preferring single tasking and traditional “*focused*” collaboration approaches
- Preferring privacy and personal space
- Preferring logical learning and training approaches
- Preferring information and teaching subjects to be presented linearly, logically and sequentially

As for the group of *Digital Natives*, who are born during or after the digital age (around the year 2000 and later) different attributes can be enumerated [10]:

- Attaching permanently to devices (smartphones mainly) and permanent online activity
- Multitasking and rapid task-switching, real-time interactions
- Preferring online socialisation
- Preferring multimedia content and online information services instead of traditional news outlets, newspaper sites etc.
- Preferring intuitive, instant and “*fun*” learning
- Preferring information and teaching subjects presented in pictures, sound, video instead of text or textbooks

Considering that both groups are the majority of contemporary populations in most OECD countries and the fact that big parts are within high income/high-value consumer groups of the population the impact for corporations must be described as very significant [11]. First the significance of this two groups is within their potential as consumers and clients. Since their consumer behaviour is heavily altered by the digital transformation, for example due to the ability to compare offers online or to rate products and share this information with others, most companies had to adapt their marketing strategies in order to keep up with such consumer behaviour changes. Second both groups are the backbone of contemporary employees. Especially it has to be considered that *Digital Natives or Immigrants* are required as digitally skilled workers in order to handle the digitally literate consumers and satisfy the market needs of a more and more digitally shaped economy [12]. There can be little

doubt about the enormous impact of the current digital transformation on education and related industries, mainly due to the fact that students, trainees, employees and customers belong to new generations of digitally literate humans, which implicates changes of their behaviour as consumers or employees but as well as societal changes in general.

3. IMPACT OF THE DIGITAL TRANSFORMATION ON CORPORATE LEARNING AND RELATED KPI'S

Facing new societal realities and changed market circumstances due to the entry of *Digital Immigrants* and *Digital Natives* into labour force, corporations started to adapt their strategies for a variety of fields. From product design to marketing and public relations to recruiting or corporate training: Literally all spheres of business have been affected by the digital transformation: Corporate learning and training are particularly affected because of their unique role as the spearhead or the foremost touchpoint with a new generation of employees [13]. Though it has to be considered that corporations are not able to avoid such an encounter with the digitally literate nor can corporations afford to ignore these groups if they do not want to lose their future prospects for serving markets full of digitally literate or even entirely digital native but financially solvent consumers. The main impact on corporate learning therefore can be identified within KPI's (*key performance indicators or generally business performance indicators*) measuring effectivity of the training delivered [14]. The case example of a sales organisation which used to train their employees with textbooks, manuals or in coaching classes might face severe difficulties achieving their sales targets when the very same training methods are applied to *Digital Native* employees. The sales organisation might even use CBT's (*computer-based training*) or WBT's (*Web-based training*), but offering the teaching subjects in a digital form does not mean the subject itself or the methodology fits the digitally literate generation's needs. For example, if textbook manuals are replaced with online available PDF's, the methodology does not change but merely the medium which carries the information. However if the findings in the previous section are considered, this would mean that such an approach might be working with certain parts of the *Digital Immigrants* but it would definitely be a strange learning approach to truly *Digital Natives*. Their preference for multimedia content, engaging and intuitive, even playful and fun learning methods or online communication indicates that the whole underlying understanding of learning/ teaching methodologies has to be reconsidered. The motivation for such reassessments of corporate learning methods and techniques, irrespective of strategic considerations, is mainly a financial one. This financial motivation might be seen two ways; the first one being the failure of achieving relevant KPI benchmarks such as sales targets or customer attrition, as described in the case example above. The second perspective on the financial motivation is a fairly traditional one: Corporate learning and training are cost drivers! Taking in account that, at least for the OECD nations, the market situation, compliance and

regulatory issues as well as technology developments are demanding more complex business solutions the following rule can be applied: The more complex the business, the higher are training and/or employee recruiting as well as corresponding on-boarding costs [15].

This means that a corporation, which is unaware of the impact of the digital transformation, might be investing in their corporate learning and training but at the same time wasting precious resources due to inept learning methods applied or a misguided understanding of their target group's needs [16]. Further research work is required to determine the effects of the digital transformation on business indicators as such innovation or human resource KPI's. So what conclusions can be derived from such a contemplation?

There are two main identifiable attributes of the digital transformation impact on corporate learning and its corresponding business performance indicators:

First a strategic one; where corporations which do not engage in reviewing and adapting their strategies regarding *Digital Natives* and *Digital Immigrants* as employees might face severe consequences for their future business growth and market position.

The second attribute of the impact is a financial one, where corporations might misdirect their investments in corporate learning or training and basically teach their target groups with outdated and ineffective methodology. Especially if it is considered that classic methods as classroom training are far more costly than *E-Learning*. In addition corporations ignoring the impact of the digital transformation might face the situation that their employees do not achieve their KPI targets due to unsuitable or misallocated corporate training [17]. Not to speak of employee motivation or hiring costs, which are heavily related to the abovementioned attributes.

4. E-LEARNING VS. DIGITAL LEARNING?

Incorporating the findings of the previous chapters, it becomes evident that, the question of how well current corporate learning methodology fits the needs of a generation of digitally literates, is of great bearing. Devoid of completeness it is impossible to answer the abovementioned question, simply due the fact that there is a multitude of corporations and ways of dealing with the impact of the digital transformation. Nevertheless a cursory trial of analysing and answering shall be possible. This can be tackled with a historical retrospective of the terminology used in the training and learning industry. As mentioned in the introduction the terminology developed gradually and under changing circumstances new descriptive terms were added. But one general and widely used term remained unchanged, becoming even more popular the more *Digital Immigrants* and *Natives* entered the markets of labour and consumption: *E-Learning*. The word itself describes any kind of learning/teaching method using computers or the internet. Being coined in the early nineties of the last century *E-Learning* became dominant and fashionable during the last decade, though it never was standardized in its definition [18]. Here lies the difficulty of the term itself and how it is understood by the broader public as well as

experts and especially training or education managers.

E-Learning is still being understood and used as a digitalized depository for learning/teaching methods from the 20th century. For the Digital Native generation any *E-Learning* would need to be adapted to their needs, preferences and particular skillsets. Taking in account that this group understands learning differently, instead of textbooks as PDF's they must be offered with more engaging and intuitive content. For example embedded audio or video content, Gamification, Mobile Learning, Adaptive Learning or Social Learning are just a few keywords associated with the learning worlds of the digitally literate generations. The options are already vast and increasing with an ever-growing introduction of new technologies and applications. Hence corporate learning and training should focus on *Digital Learning* instead of sticking to old-fashioned but inadequate methods just offered in a digital manner.

Having in mind that the digital transformation changed society, customers and employees it is remarkable how inert the respective terminology and its understanding is being adapted. If the finding that the impact of digital transformation has tremendous financial implications for corporations is added to this contemplation, this inert gap becomes evident. That might have a concerning reason: For great parts the impact of digital transformation might not have been understood by corresponding corporate experts and managers. This can probably be linked to the consideration that most corporate managers are of a certain age, therefore not strictly belonging neither to *Digital Immigrants* nor *Digital Natives*. On the other hand this would be a simplified explanation ignoring the statistical facts about population compositions and the general need for technology adaptation during the last two decades. The most plausible explanation is rather simple: The digital transformation is fast, erratic and manifests itself in a multitude of shapes depending on the specific situation of the respective corporation [19]. Therefore it can be assumed that not only the terminology, such as the word *E-Learning*, might be outdated and inapt but the whole understanding of the digital transformation and the corresponding phenomena of *Digital Immigrants* and *Natives* in relation to corporate learning. Of course this statement has no general validity nor is it final, since the assessment would really depend on the specific case of each industry or company. This findings indicate where much that *E-Learning* should be seen on far broader base of digital opportunities, and probably the term itself could be replaced with the far more suitable descriptive term: *Digital Learning*.

5. CONCLUSION

The ongoing digital transformation of the human society is affecting customers and employees in various ways. Societal and economical behaviour is being altered due to the impact of new opportunities created through new technological applications. This process is happening rather fast, erratic and can manifest itself in a multitude of ways. Corporations face an existential threat if the impact of digital transformation is not considered, since the changes have financial implications. Corporate learning and training can be afflicted by misallocation of resources

due to the disregard of the altered learning behaviour of Digital Immigrants and Digital Natives. Such a development is likely when corresponding corporate learning experts and managers do not fully understand the impact of the digital transformation. This finding manifests in the terminology used and its general understanding by experts and managers. E-Learning is still widely understood as a digital medium of learning concepts from the 20th century, although the predominant groups of consumers and employees are increasingly digitally literate millennials. This implicates a broader understanding of digital opportunities for learning/teaching and a whole new set of methods appropriate for *Digital Immigrants* and *Natives*. Therefore an adapted view and understanding is required, which could be reflected in the term Digital Learning instead of the old-fashioned E-Learning.

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