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Digital Creativity: Upgrading Creativity in Digital Business

Edin Smailhodžić and Denis Berberović

Abstract

Creativity has become one of the most important driving factors of today's digital business environments. Businesses are increasingly looking for creative employees who can offer new and out-of-the-box solutions to existing problems. Companies go through the process of digital transformation by increasingly changing the ways in which they employ digital technologies and develop new digital business models that help to create and to capture value. Combined with a creative approach, companies have experienced a surge in creative digital solutions. However, the creative process is not a self-perpetuating mechanism. It must be initiated and supported by organizations. This is done by understanding the creative process itself and by making small but fruitful adjustments to the work environment and the overall management of the workforce. As three chosen real-life examples will illustrate, such approach results in unleashing powerful creative energy that offers new services to the market, new approaches to solving existing problems, or as seen in the case of Uber—bringing in a completely new business model based on creative solutions and innovative approaches to different aspects of business operations.

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1 Introduction

1.1 Digital Transformation and Creativity

In this chapter, we would like to outline the process of digital transformation and the increasing importance of creativity in the new digital age. Our economy is transforming, and the ways in which we create, communicate, work, and collaborate are changing (Rogers 2016). Today's society and business landscape are characterized by trends such as pervasive connectivity, improved performance of information technologies, information abundance, and emergence of big data (Bharadwaj et al. 2013). Accordingly, digital transformation and new business models have also changed consumers' expectations imposing pressure on traditional companies (Verhoef et al. 2016). In this new digital age, creativity and innovation play an important role in creating value for businesses (Sousa and Rocha 2019). Although creativity and innovation have always been important, their nature is changing in the digital business context (Hinings et al. 2018). Competition between companies is now not only based on the quality of products or efficiency in satisfying consumer needs but rather how innovative products are, how well they are designed and how well they solve a consumer problem in a creative manner. This becomes especially important as digital transformation cuts across industry boundaries (Hopp et al. 2018). Competitors are not only traditional companies in an industry, but also digital companies who are using their digital resources to enter the new markets. For example, apps, such as Google Maps, are competing with traditional navigation companies such as Garmin and TomTom, which led Garmin to lose 70% of its market capitalization two years after the navigation apps were introduced (Downes and Nunes 2013).

New digital businesses are one of the examples of the digital transformation era. In line with this, the behavior of customers is also changing. They often become co-producers of the products through, for instance, crowdsourcing campaigns. Furthermore, their expectations have changed. Consumers have the intention to buy and have access to products and services in an easier and more convenient way than ever before. They want to order products online and receive them the next day; this is resulting in an increasing trend for electronic commerce. For example, 69% of Internet users in the European Union shopped online in 2018 (Eurostat 2018). Changes like this are creating the shift in the economy, and companies need to adjust to this or they often go bankrupt. And platforms, like Netflix, are transforming industries, driving big players such as Blockbuster to bankruptcy.

Due to these changes in the economy, the workforce is also affected and must adjust. Employers now require employees to have different skills than before. It seems no longer to be important how much employees know, but rather how well they can apply their knowledge. In the digital era, skills that are essential are higher-order thinking and creative problem solving, as companies increasingly depend on the creation of new products, services, and processes in order to remain competitive. These skills rely on the fact that we must find meaning or patterns in

big data. We have to be creative and find insights that will help to solve problems in a different way than usual (Brinson 2017). For example, big data can be used as a digital asset in order to personalize products and services (Verhoef et al. 2016)

This implies that the digital age is in a way extension and elaboration of the twentieth-century knowledge age. The world is moving toward the right-brained intuitive and creative world instead of a left-brained logical thinking world. The rising automation resulting in increased productivity means that there might be less need for labor in the future. This further leads to more time for other activities, and one of the alternatives is creative work. At the same time, the world experiences a greater need for innovative ideas. The current business environment features a fast strike mentality of companies that aim to disrupt competitive advantage of market leaders, which makes competitive advantage of companies no longer sustainable in the long run (D'Aveni 2010). Thus, this illustrates the increasing importance of creativity and reinvention to remain competitive. Along with this, there is an increasing need for creative people in the workforce, not only for artists and designers (Areete 2018). A creative approach is also needed in business management and strategic planning. Due to the shift of the digital era, jobs for creative people have also changed as they are needed in the more traditional roles within a business in order to help change companies that seek to be competitive in this era of change.

All these changes in the process of digital transformation point to the importance of new skills such as strategic imagination and creative problem solving (Mills 2015). In particular, it is important to have the skill of thinking outside of the typical roles and tasks that one does on a daily basis. Actually, employees should be supported in thinking outside of their tasks and how they can make it more efficient. In an increasingly changing environment enabled by digital transformation, creative problem solving becomes of utmost importance in regard to problem solving and finding new entrepreneurial opportunities. Creativity and critical thinking are not only important today but also projected to be the skills in most demand in the future (World Economic Forum 2018).

2 Theoretical Background on Creativity and Digital Business

2.1 Creativity

Before we can start linking creativity to digital entrepreneurship, we need to define what creativity is and why it is important. Simply defined, creativity is the act of turning new and imaginative ideas into reality (Naiman and Naiman 2017). According to Amabile (1988), it applies to both idea generation and problem solving. However, Amabile et al. (2005) also emphasize that these ideas should not only be novel but also useful. In the context of organizations and workplaces, creativity is seen as the creation of new and useful products, services, and processes by employees (Woodman et al. 1993). Creative people have the ability to perceive

the world in new ways, to find hidden patterns and find connections between unrelated issues. This all makes it possible to generate new solutions.

Creativity should not be seen only as a form of art or an idea. Those are outcomes of a creative process. Creativity itself is a process that takes multiple steps to create the results (Scy 2016). It all starts with a problem that we think of. If this problem does not contain the formula to solve itself, we have to use our creativity to come up with a solution to this problem. We are not able to objectively measure creativity because it is mostly subjective. Outcomes to the problems are usually based on two principles; the idea is most useful or unique. If an idea is useful, it is relevant to the task it needs to be solved. When an idea is unique, it is different from other ideas and not experienced before. To be creative, it is important to not stop at a useful idea. Most people can come up with this. The hard part is to keep thinking and creating an idea that is unique. The creative process takes time and patience, especially to learn the art of being creative. With creativity, there is no guarantee that you come up with new, creative ideas every time that is useful for your project. So, the creative process is guaranteed but the outcomes are not (Scy 2016).

In addition, research has shown that there may be different types of creativity. The types of creativity are based on either emotional or cognitive and spontaneous or deliberate (Al Balooshi 2016).

1. *‘Thomas Edison’* type of creativity. It is called Thomas Edison because he ran experiment after experiment before he came up with an invention.
 - Based on deliberate and cognitive.
 - Comes from continuous work.
 - Implies putting together existing information in new ways.
2. *“Aha moments”* type of creativity.
 - Based on elaborate but emotional parts.
 - *“Aha moments”* have to do with the emotions and feelings and are not continuously focusing on one work.
3. *“Isaac Newton Eureka moments”* type of creativity.
 - Occurs suddenly.
 - Spontaneous and cognitive creativity.
 - It implies working on a problem for a long time and not be able to find solutions. Then when doing something else, flash-insight arises with a solution for the problem.
4. *“Epiphanies”* type of creativity.
 - Spontaneous and emotional type.
 - Mostly used by musicians and artists.

- It is not cognitive, but mostly a skill is needed to perform this kind of creativity such as playing guitar or writing skills.

Another type of categorization of creativity concerns the type of people and the approach to creativity. This is also relevant as people are very different in the level of creativity and in the manner of how they express creativity. In this respect, we can divide people into adaptors and innovators. Adaptors are people who are trying to improve things but within the general system. They are trying to find ways to do things better and more efficiently. Adaptors often work in professions that have stability and order. They link ideas they have to the problem they have and pertain persistent in this. They could be somewhat linked to the process of exploitation, which is described by March (1991). He describes the process of exploitation as focused on refinement, efficiency, selection, and implementation. The second type of creative person is innovators. They like to do things differently than ordinary businesses and people do it. Innovators challenge the status quo. They often come up with radical changes and plans, whereas adaptors like to do things better, innovators like to do things differently. The ideas that innovators come up with are often related to bringing new elements in the problems and changing the formulation of the problem. Same as with adaptors, the role of innovators can be linked to March's (1991) process of exploration, which is focused on concepts such as risk-taking, discovery, and innovation.

Although people can be categorized in these two groups, there are some other factors that both groups should have to be successful in creating creative solutions for problems. Some of the most important ones are motivation, curiosity, and social network. Specifically, motivation represents a crucial part of creativity. Motivation is the measure of emotional investment that makes people break with the old situation and move into a direction with a situation that they actually want (Kim 2018). This desire to move to something new starts the process of creativity. So, to start the creative process, every person needs at least motivation to start it and create something new. After feeling motivated, people get curious about searching for unknown information that can be useful. Curiosity can be frightening due to the fact that something that can be potentially dangerous one has to transform into something manageable and interesting. When fear arises, curiosity is hard to sustain (Kim 2018). An issue often neglected is the social nature of creativity. The power of an unsupported mind is often overrated. A lot of intelligence and creativity results come from interaction and collaboration with other people. Creativity does not develop in people's minds but in the interaction between people's thoughts and a sociocultural context (Kim 2018). For example, supportive supervision and perception that an employee's supervisor is supportive of new ideas have always been an important condition for creativity (Oldham and Cummings 1996). Furthermore, a positive peer group and the participation of others within the company are also important requirements for employees to excel at creativity (Hunter et al. 2007).

2.2 Digital Business

Due to new technological innovations, new ways of conducting business, connecting, and collaborating have been established. The new technologies, such as social media, are building bridges between people, which makes connecting with each other much easier. Digital technologies also have challenged companies forcing them to continuously innovate in order to achieve competitiveness in this new landscape as business models evolve and companies experience immense pressure to stay on track (Fenwick 2016).

Business models have changed, and companies are challenged to keep up. Digital business is about the creation of new value chains and business opportunities that traditional businesses cannot offer. It is the creation of new businesses where the lines between digital and physical worlds are blurred or not even visible. For example, most start-ups these days are digital businesses that solve a problem or have a solution to make day-to-day tasks easier and more convenient. Examples of digital start-ups that have become successful are companies such as Uber, which makes it easier to go to places for a lower price than conventional cabs; or Airbnb, which provides a place for people who want to rent their house and people who are looking to rent a house for the vacation of other purposes. Both of these companies are digital businesses and do not have any physical products.

Wirtz (2018) defines digital business as the initiation, transaction, and maintenance of the service exchange process between economic partners through information technology. Some of the most important elements in the digital business are mobile technologies, social media platforms, analytics, and cloud computing technologies (Fischer and Lopez 2019). Some examples that make these of key importance for digital business are that mCommerce has an increasing part in the total of electronic commerce, social media platforms such as LinkedIn and Facebook have changed the ways in which people meet and collaborate and big data analytics enable businesses to uncover hidden patterns, which lead to reduction of costs and better decision making. Overall, the digital business helps to eliminate barriers that now exist among industry segments while creating new value chains and business opportunities that traditional businesses cannot offer (Fenwick 2016).

However, digital businesses also face challenges such as pervasive connectivity, which challenges companies with their speed of product launches and decision making (Bharadwaj et al. 2013). Fast product launches by digital natives such as Facebook, Google, and Amazon are putting pressure on companies to introduce their products fast. Furthermore, the same platforms and big data pose challenges to react in real time as well as to access, process, and analyze data that become available in a digitally connected world. Such developments enable hyper-connections among customers, companies, processes, and things. Taken together, digital contributes to the hypercompetitive digital economy. With hypercompetition, no competitive advantage is sustainable in the long term (D'Aveni 2010), which emphasizes a need for businesses and individuals to be creative and continuously reinvent and innovate.

2.3 Toward Digital Creativity

2.3.1 How Is Creativity Related to Digital Business Ideas?

For the purpose of this chapter, we define digital creativity broadly as all forms of creativity driven by digital technologies (Lee 2012). Understanding and adopting digital innovation have become more important for existing businesses. For example, banks need to keep up with the latest financial technology to keep being relevant for customers and universities need to change the way they educate students. Keeping up-to-date with the latest digital innovations is not easy, and creativity plays an important role in this adapting phase (Medium 2017). Digital innovations need individuals who are thinking differently and can change the business. Innovators are crucial for developing new digital innovations that will keep businesses up-to-date with the latest trends. The creative process of digital innovations is a structured process that needs guidance and a clear goal. People need to think differently about the possibilities and impossibilities of new technologies. In addition to this, it is important for companies to embrace the creative process and look for new opportunities as well as risks.

In today's world, creativity can facilitate the creation of value, and therefore, it is an important aspect for companies. Due to the fact that the world is changing and is becoming more digital, customers expect this from companies as well. The customer wants to do everything online, and therefore, companies have to adjust. With this adjustment, creativity plays an important role. But how does a manager create value for customers and what makes it different from other companies? Companies should be creative and innovative in the way they adapt to the digital business age because it can create a lot of value for the company. Companies who stay behind will lose customers and eventually will not survive. Thus, companies have to focus on the digital age and provide creative and innovative solutions for existing problems that conventional companies cannot solve (Solomon 2018).

Although creativity has been traditionally regarded as a key in search of innovative ways for generating revenues (Amabile et al. 1996), it is especially important in the age of digital. Digital increases the importance of business agility and speed to market (Luftman and Derksen 2012), and it has been suggested to pay attention between digital and creativity (Yoo 2010). Digital enables individuals to have access to the Internet and other technologies anytime and anywhere allowing them to stimulate their creative thinking (Bal 2013). Given that the employees can achieve creative products through communication and collaboration (Amabile et al. 1996), the link to digital stimulates the creative process in the creation of new digital businesses.

2.3.2 How Can Organizations Develop and Strengthen Digital Creativity?

Digital creativity in businesses can be strengthened mostly due to the culture that lies within a company. Creativity and creative thinking should be encouraged; even if mistakes occur, employees should be motivated to further pursue their creative approach. As already pointed out, inspiration is needed for a creative mindset. The

workplace should encourage inspiration and therefore offer an environment that is boosting the inspiration (Magitti 2018).

Some of the traditional ways on how businesses should boost creativity (Noice 2019) can also be applied to digital context as follows:

- *Search for new experiences and perspectives.* Discussions with people from different departments, work with clients from different industries, or receiving help from non-profit organizations. This helps in critically approaching defined problems and enhances creative solutions.
- *Spending time to think about new ideas on a daily basis.* Even if it is only for 15–20 min, it will help with the creative process because individuals are aware of the time they spend on bringing up new ideas. Detaching from daily routines has a positive effect on finding new ways of solving specific issues.
- *Making weekly goals.* Planning how many ideas one wants to come up with and stick to it. In this way, one will be motivated to keep the creative brainstorming sessions useful.

However, Rogers (2016) suggests a more specific enabler for digital creativity and transformation, specifically rapid experimentation. In particular, he suggests that the firms must change their strategic assumptions from those that apply to the analog era to those that apply in the digital era. These concern being able to make decisions based on testing and validating rather than on intuition, considering that the testing ideas can be done in a cheap, fast, and easy way rather than seeing it as expensive, slow and difficult process, conducting experiments constantly by everyone and not only by experts infrequently, and focusing on minimum viable prototypes and iterations after lunch and only focusing on ‘finished’ product.

Finally, it is important for an employer to promote creativity by creating a work atmosphere where effort and failure are respected and not punished. It takes brave and open-minded employees to come up with new ideas and pitch them to supervisors; therefore, respect is highly important even when an idea does not appear to be great. Employees should feel motivated to find another idea or improve the existing one. In cases where employees are being punished for erroneous attempts (ideas), a decrease in motivation may result in lower creativity and even worse ideas.

Difference between traditional companies, digital businesses, and start-ups is that traditional companies usually do not apply such encouraging workspace. Start-ups often offer more flexibility and promote the creative process with greater passion. The biggest difference between working in a digital start-up or a traditional company is that working tasks change very quickly in a start-up when the organization is successful and growing. Usually, employees in a start-up have more responsibilities, and therefore, more creativity is required to solve problems that emerge with a growing business. Due to such problems that need to be solved, there are many opportunities to experiment with new ideas. If a failure occurs, another idea from the pool of ideas is selected and implemented. In a traditional company, this is more difficult due to hierarchical layers and due to the fact that employees are accountable to their supervisors.

2.4 Critical Perspective on Digital Creativity

Digital creativity can bring a plethora of positive outcomes regarding business ideas and solutions for current problems. However, there are several challenges in regard to the creative process of companies. The main issue is the fact that the transition to a more creative economy carries significant costs for an existing business (Lehrer et al. 2018). Businesses have to keep up with the newest innovations to keep competing with new start-ups which usually appear with creative solutions for an existing problem.

Creative people are a good asset to the company; however, people are hired to work. If they do not deliver what they are hired for but keep coming up with new ideas, companies will not run smoothly and work will not be done. In addition to this, one cannot always apply new ideas. Sometimes, it seems best to first focus on one new idea and then after it has been implemented or refused, to look for additional innovations (Lehrer et al. 2018).

Another point is that not all ideas or innovations are useful (Soulsby 2019). Therefore, it is important to have a good look at which innovations need to be implemented and which are not worth the time and money. A good working system to decide which innovations are relevant can save a lot of money and time for the company. If companies focus on an innovation that is not relevant and do not add any value to the company, it can lose the competition with other companies who choose another innovation (Sherman 2019).

Sometimes it is better to be cautious with the company's decisions and not taking high risks. When there is economic uncertainty, it might be better to not implement creative ideas with the risk that it will fail and increase costs. In such situations, it might be better to be cautious and not experiment with creativity (too much).

A more in-depth risk of implementing creative and innovative ideas is that a certain idea or project takes too long to implement. This is a very costly occurrence, and businesses can run out of money which results in insolvency risk for the business. This can cause problems with the future existence of the company. The new innovative product can face the fact that it is more difficult to produce and therefore not produced on a large scale which results in higher production costs (Soulsby 2019). The return on investment is not guaranteed which then can anger investors and stakeholders (Sherman 2019). Another downside of innovative products is that quality can be received as poor and then damages the reputation of the whole company. This has consequences not only for that product but also for the company. The company can be facing lower sales levels which then would affect the financial position of the company.

There are multiple examples of innovation that went wrong. But there are two types of innovations that went wrong. One is a new product or service that was not received well by the market. The second is the lack of innovation in which companies stayed behind their competitors which resulted in a loss of market share. When this happened, it is usually too late to catch up.

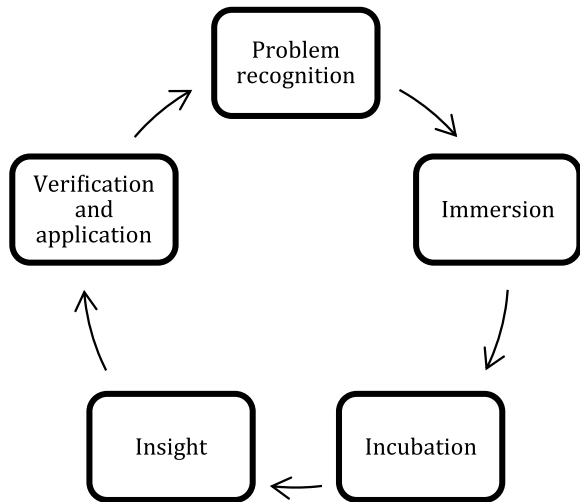
A good example of a failed innovation is Google Glass. This product was developed by Google in 2014. It was supposed to be a great innovation with a computer that was always on and always provided real-time information. It displayed information in a smartphone-like way, and it was also hands-free. Wearers could communicate via voice commands and so command Google Glass to implement commands (Kariff 2019). When Google started selling the glasses, it got significant criticism, where the main critique was that it violated the privacy laws. After the criticism and the fact that it flopped, Google announced to stop the production of the glasses in 2015. In 2017, they again started with the production with an adjusted version but this time more focused on usage within companies and in the medical sector (Williams 2019).

One of the world's most famous examples of failure to innovate and therefore lose the complete market is Nokia. This mobile phone brand refused to make the innovative leap from phones to smartphones. Nokia was the best-selling phone brand in the world. When Apple became a serious competitor of Nokia, it failed to respond in a proper way. The technological innovations of Nokia were nothing compared to those of Apple. The top managers were arrogant and refused to change their strategy and invest more in innovation (Doz 2019). The failure of Nokia can not only be assigned to not innovating well enough because there were many internal problems within the company. The organizational structures were dysfunctional and managers were competing and thwarting each other. This was the ground for the poor strategic decisions the company made. For example, they used an operating platform for their smartphones called Symbian. At the beginning of smartphones, this operating system gave Nokia an advantage but eventually caused delays because for every different phone new code had to be developed and tested. The management was struggling with finding proper solutions and made crucial strategic mistakes. The software was becoming more important in the smartphone market than hardware. Due to the struggles with the operating system Symbian, Nokia could not keep up with this change and lagged behind. Additionally, the applications became more important but Nokia lacked the skills to develop these applications and struggled again with keeping up with their competitors. By 2010, it became clear that Nokia had fallen behind due to the usage of their operating system and the lack of skills to develop applications. Nokia missed these innovations and stood still in a rapidly changing and developing market.

3 Conceptual Model

3.1 Digital Creativity Process

The creativity process consists of five different stages, with each of them having a distinct length. Depending on the organization, this process can be altered, but it usually does go through all these stages. Some of the phases can even happen simultaneously, such as immersion and incubation. Leaps from one stage to the

Fig. 1 Conceptual model

next are sometimes difficult to distinguish as lines between different stages are not always clear, such as between incubation and insight (Gannett 2018) (Fig. 1).

Stages in the creativity process are as follows:

1. *Problem recognition*—when facing challenges in the digital business environment, both organizations, as well as employees, initiate a problem resolution process. This phase implies considering the challenge and starting a creative process whose final output is a solution for the emerged issue. In terms of the digital business environment, this is an often occurring process; in fact, the digital business environment is a challenge in its own right, and most of the digital businesses emerged actually as responses to these challenges. It is further important to emphasize that in terms of starting the creative process, it is highly important that the emerged problem is being approached as an opportunity and not as a threat. That leads to creativity being unleashed to its fullest extent. It must also be noted that ‘problems’ in digital business are not necessary situations that represent an obstacle. It might well be those common situations, activities, operations, etc., in the real world that represent a valuable territory for creative digital solutions. (Weill and Woerner 2018).
2. *Immersion*—after the challenge has been detected and defined, even vaguely, employees will start to gather information in order to be able to approach the issue from different angles. By doing so, they delve deeper into understanding the challenge. This is a crucial phase as it not only helps to understand the challenge from different perspectives, but it also immediately initiates possible solutions. Digital creative solutions are in most cases focused on finding IT solutions; however, there has been a slight shift from finding pure IT solutions to creating solutions that are focused on finding the more comfortable, artistic, fast, or easiest option.

3. *Incubation*—collecting information in order to encompass all aspects of a challenge does not go forever. When the point of saturation has been reached, creative minds usually stop collecting information and even stop thinking about it. Usually, they engage in completely different activities, the ones that are not related to the challenge. Employees would be well advised to stop thinking about the new app they are currently trying to develop, or about the possible solution to the defined IT problem. By ‘cooling down’ the mind, employees actually move from an active to a passive state of finding a solution. Namely the task of finding a solution with all the gathered data is assigned to the subconsciousness, which keeps working even during the state of mind’s rest. This is the reason why most companies nowadays, particularly IT companies, actively support employees in taking time off and resting their minds and bodies. By helping them take the pressure from everyday activities at work, the room is made for creativity.
4. *Insight*—it is exactly in moments of rest and relaxation when suddenly solutions to existing challenges arise from the subconscious to the conscious level. Therefore, creative minds, such as artists, copywriters, and designers, usually have small books by their side, or apps to help them catch sudden ideas and insights. This phase is also called the ‘Aha!’ or ‘Eureka’ moment, as it is characterized by a sudden surge of solution. As we live in times of portable devices that offer the opportunity to implement the newly emerged idea instantly, it is no surprise that a sharp rise of experimentation and implementation of newly emerged digital ideas has been noted.
5. *Verification and application*—finally the creative solution needs to be tested—does it work? Does it need an alteration? An immediate upgrade? Due to its nature, digital business is particularly prone to these instant and immediate tests. It is important to note that such tests often lead to emerging of additional challenges or problems. This sparks the creative process again, starting with the first phase—problem recognition. This is the reason why the creative process has been depicted in this chapter as a circle, without a definitive beginning and end.

3.2 Boosting Creativity in Digital Businesses

In order to support creativity in digital businesses, companies have several tactical tools at their disposal.

- (a) *Diversity*—it has been for decades now that companies have realized that diversity opens new ways for creativity. Diversity in organizational culture brings in new approaches, fresh insights, and different, sometimes even unthinkable, perspectives to existing problems. Seen through the lens of creativity, for digital businesses nowadays this implies a set of different solutions to one existing problem.

- (b) Breaks—as discussed in the section on the creative process, rest and relaxation play an important part in supporting the creative process. Pushing creativity to the edge can and often is counterproductive. What seems rather lazy, such as having several short breaks, is, in fact, a better way to improve creative productivity. It is often the calm moments that precede important creative breakthroughs.
- (c) Reduced time pressure—this builds on the previous point. Breaks help in taking some time off, mostly taking pressure from employees. Time pressure gives people the adrenaline shot to finish operational tasks in the most efficient way. However, it is rather poisonous for creative solutions which for the most part need a strategic approach.
- (d) Change the scene—this builds also on one of the previous points. While diversity implies different psychological and cultural perspectives, there is a rather simple way to achieve diversity (although somewhat superficial). By simply rearranging the work environment, or including the lately famous work-from-home approach, employers can boost creativity in their businesses.
- (e) Embrace failure—failure is certainly the first step to success. Failing implies learning; failing implies realizing what does not work; failing narrows down options; failing might lead to solutions to other problems; failing leads even to the improvement of the solution which will work.

4 Examples from Practice

Case 1: Tesco in South Korea

South Korea has been a hard market for large retail companies such as Walmart. Tesco Homeplus has been founded by Tesco and Samsung, and it has grown into the second-largest retailer in South Korea. Homeplus has always aspired to become the leader in the market but was hesitant to increase the number of its retail shops. In line with this, they conducted research on the style of life and shopping habits of South Korean customers. Findings of this market research indicated that the people were working long hours and found their time very important. On the one hand, time devoted to shopping for groceries did not have a high priority. On the other hand, South Koreans are heavy users of technology and 95% of the population own smartphones (Taylor and Silver 2018). Combining these two findings, Homeplus decided to think out of the box and be more creative than just setting up physical stores to compete with other retailers. They decided to start the concept of the virtual store. Homeplus created virtual stores in subway stations with the displays that matched exactly the ones in the actual stores. Customers were able to use their smartphone app to scan a product they would like to buy and complete the order. Their order would then be delivered to their home the same day. This creative move

by Homeplus largely increased their sales and made them leading in the online market and second in the offline market for groceries. Online shopping is not a new phenomenon, but Homeplus used its insights into a very creative way to make it extremely convenient and appealing for the customers. The customers found the idea appealing to them because it met their shopping needs, but also turned their waiting time at subway stations into productive shopping and maximized their free time. In 2011, they won the Grand Prix award for mobile creativity emphasizing success in changing the way the people used mobile technologies. Homeplus was able to do this as they looked at its organization and competition in a different way than its competitors. They creatively created a novel and useful solution that mimicked real store shelves with digital displays. In addition, they brought together marketing and sales as the marketing of their company and products directly became sales. Their creativity in this process was expressed through the creative combination of two existing products, namely smartphone app and digital displays.

Case 2: Benchvertising

When Nermin Velagić, the founder of Benchvertising.com, started working in the advertising industry, he did not really plan to introduce innovations that would take advertising to a whole new level. His first business venture within this industry was focused on installing classical benches in parks and main pedestrian zones in the City of Sarajevo, Bosnia, and Herzegovina. When not in use, part of the bench used for sitting would fold, thereby exposing a highly visible surface to anyone walking nearby. Being installed in places with high frequency, these benches became a very attractive communication medium. Several hundreds of such benches were installed and advertisements of major Bosnian–Herzegovinian advertisers were highly exposed. It was a win-win-win situation for municipalities, advertising agencies, and the public, i.e., (potential) consumers.

However, as consumers embraced digitalization in every aspect of their everyday lives, Mr. Velagić was aware that he had to follow. Instead of starting a completely new (digitalized) business idea, he decided to do something extraordinary with the current business. He decided to digitalize the bench! A very traditional, simple artifact has been around for centuries in more or less the same shape and with a very basic function.

Meanwhile, very much as the whole of Europe, Bosnia and Herzegovina faces the demographic trend of an aging population. For local communities, among other things, this implies an increasing need for benches—in parks, pedestrian zones, around medical, and administrative facilities. In terms of costs related to benches, local authorities face rising costs of purchasing, installing, and maintaining them. In times of increasing pressure to achieve high-cost efficiency, financing benches represent a growing challenge for local authorities with anyhow tight budgets.

Having in mind the need to ‘go digital’ and finding out the problem of long-term financing the rising need for benches, Mr. Velagić, again, came to the idea to create a win-win-win business concept. He created digital benches labeled as ‘Benchvertising’ which provides a web, cloud-based, communication tool that allows owner/user to upload content, create, and schedule campaigns, to manage

execution as well as to control screens on benches. It is an advertising display on a city bench, used to present an advertiser's product or service. It is a new and innovative way of digital-out-of-home (DOOH) advertising venture. Mr. Velagić claims that Benchvertising's social influence is immense, as it not only revolutionizes the traditional bench by bringing people together, but it also brings dynamics to usually calm areas in local communities where benches are installed. And finally, not least important, it tackles the issue of financing benches as it represents a profit source for bench owners/vendors.

In order to enhance the spread of these benches around the world, Mr. Velagić and his partners have decided to approach this business initiative by applying a well-known business model—franchising. Benchvertising.com is franchising their expertise to allow franchisees an opportunity to share their vision of the future of advertising, which helps local community growth and brings a substantial income to the franchisee. Only Benchvertising.com franchisees are entitled to strategically position and manage benches in their local community and to sell advertising slots to other businesses. To conclude in Mr. Velagić's words: 'We think this is the best way to combine a global-born digital initiative with local knowledge and expertise.'

Case 3: Uber

Another case in point when thinking about digital business and creativity is Uber. Uber was founded 10 years ago and was one of the fastest-growing companies in the world. In those years, Uber created over 160,000 jobs in the USA (Siu 2016).

The idea of Uber arose from the cab problem in San Francisco. Inhabitants thought of a simple way to solve the problem and avoid waiting on the streets of San Francisco and avoid getting stranded. They came up with the Uber app that helped connecting local drivers and passengers. It was initially launched in San Francisco but already a year later it expanded to New York which proved that it was a good and convenient alternative to the public transport and often more expensive cabs (Hyder 2017).

Uber quickly became very popular due to its simplicity and convenience. It matched the problem of the cabs in San Francisco with the upcoming mobile technology, thus offering solutions with new approach to digital creativity. Namely Uber makes use of GPS systems to locate the drivers and passengers making it easy for both parties to see where the other is. It uses also digital payment opportunities via mobile phones, creating thereby not only a unique service experience for the user but also a highly safe service offer for drivers because no cash is involved (Hyder 2017). Uber relies on digital solutions for service quality feedback, as its application also offers driver feedback which improves the experiences for the customers. This transport service is available by charging a 20% fee over each ride. However, the app can be used for free. Even though customers' overall feedback appears to be highly positive, the company and its application are continuously changing as new features are added. For example, the latest feature makes it possible to choose the type of vehicle that you want (Siu 2016).

This creative digital solution to solving an intense cab problem leads to a large company emerging based on a rather simple digital solution. Furthermore, it disrupted not only the cab service industry but also the whole car industry as Uber has changed the concept of owning a car (Siu 2016). Uber fares are comparatively cheaper to rivals and sometimes lower than cab fares, and passengers can always order an Uber. Therefore, it disrupts the car industry in the sense that people do not find it necessary anymore to own a car on their own (Hyder 2017).

5 Practical Implications

The new technologies are building bridges between people and make connecting with each other easier. It is important to emphasize that creativity is being encouraged in businesses to support employees to come up with new ideas and solutions for problems that have arisen. Due to an increasing interest in the creative process by people and companies, and the fact the economy is shifting toward a new digital era, new digital businesses and start-ups are booming. New ideas to make our lives simpler are being thought of every day, and this will continue for years to come. This era is mainly focused on making people's lives easier and more convenient since people are increasingly busy and do not have time to do other things. Of course, shifting to this digital era also has its drawbacks and carries new threats, such as hackers. Data can be stolen and manipulated, thereby affecting people's privacy. On the other hand, this problem creates not only new jobs but whole new industries, such as IT security, offering opportunities for new digital businesses to emerge.

References

- Al Balooshi, M. (2016). *There are 4 types of creativity*. Retrieved from <https://www.linkedin.com/pulse/4-types-creativity-maryam-al-balooshi/>.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123–167.
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367–403.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154–1184.
- Areete. (2018). *Conceptual age—Knowledge, skills and attitudes*. Retrieved from <https://areete.wordpress.com/2011/11/02/conceptual-age/>.
- Bal, S. N. (2013). Mobile web—Enterprise application advantages. *International Journal of Computer Science and Mobile Computing*, 2(2), 36–40.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 471–482.
- Brinson, S. (2017). *The conceptual age: The importance of higher order thinking*. Retrieved from <https://www.diygenius.com/higher-order-thinking/>.
- Bullas, J. (2015). *3 digital start-ups that that made it big*. Retrieved from <https://www.jeffbullas.com/3-digital-start-ups-that-that-made-it-big/>.

- D'Aveni, R. A. (2010). *Hypercompetition*. Simon and Schuster.
- D'Aveni, R. A. (1994). *Hypercompetition: Managing the dynamics of strategic maneuvering*. New York: Free Press.
- Doz, Y. (2019). *The strategic decisions that caused Nokia's failure*. Retrieved from <https://knowledge.insead.edu/strategy/the-strategic-decisions-that-caused-nokias-failure-7766>.
- Downes, L., & Nunes, P. (2013). Big bang disruption. *Harvard Business Review*, 44–56.
- Eurostat. (2018). https://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce_statistics_for_individuals.
- Fenwick, N. (2016). *Digital business: Transformation, disruption, optimization, integration and humanization*. Retrieved from <https://www.i-scoop.eu/digital-business/>.
- Fischer, K., & Lopez, J. (2019). *What is digital business and why it matters?* Retrieved from <https://www.dvt.co.za/news-insights/insights/item/97-what-is-digital-business-and-why-it-matters>.
- Gannett, A. (2018). *The creative curve: How to develop the right idea, at the right time*. New York, USA: Penguin Random House.
- Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital innovation and transformation: An institutional perspective. *Information and Organization*, 28(1), 52–61.
- Hopp, C., Antons, D., Kaminski, J., & Oliver Salge, T. (2018). Disruptive innovation: Conceptual foundations, empirical evidence, and research opportunities in the digital age. *Journal of Product Innovation Management*, 35(3), 446–457.
- Hyder, Y. (2017). *Uber's evolution: From San Francisco to international disruption*. Retrieved from http://soumyasen.com/IDSC6050/Case15/Group15_index.html.
- Jaffe, E. (2017). *The key to creative insight can be simpler than you think*. Retrieved from <https://www.fastcompany.com/3035811/the-key-to-creative-insight-interrupt-yourself>.
- Kariff, O. (2019). *Bloomberg—Are you a robot?* Retrieved from <https://www.bloomberg.com/news/articles/2015-08-20/google-glass>.
- Kim, L. (2018). *9 ways to dramatically improve your creativity*. Retrieved from <https://www.inc.com/larry-kim/9-ways-to-dramatically-improve-your-creativity.html>.
- Lee, K. C. (ed.). (2012). *Digital creativity: Individuals, groups, and organizations* (Vol. 32). Springer Science & Business Media.
- Lehrer, J., Baker-Whitcomb, A., Oberhaus, D., Simon, M., Gertner, J., & Harrison, S. (2018). *The cost of creativity*. Retrieved from <https://www.wired.com/2012/03/the-cost-of-creativity/>.
- Lipscomb, W. *What are the main characteristics of creativity?* Retrieved from <http://www.icreate-project.eu/index.php?t=179>.
- Luftman, J., & Derksen, B. (2012). Key issues for IT executives 2012: Doing more with less. *MIS Quarterly Executive*, 11(4).
- Magitti, P. (2018). *Creativity requires a culture that respects effort and failure*. Retrieved from <https://www.businessinsider.com/how-to-build-creativity-in-business-2013-3?international=true&r=US&IR=T>.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71–87.
- Medium. (2017). *Working at a startup vs. working at a large, established company: What to expect*. Retrieved from <https://medium.com/office-hours/working-at-a-startup-vs-working-at-a-large-established-company-what-to-expect-d1b5e21a420>.
- Mills, F. (2015). *The conceptual age and right-brain skills*. Retrieved from <https://www.icmi.com/resources/2018/The-Conceptual-Age-and-Right-Brain-Skills>.
- Naiman, L., & Naiman, L. (2017). What is creativity? (And why is it a crucial factor for business success?). Retrieved from <https://www.creativityatwork.com/2014/02/17/what-is-creativity/>.
- Noice, M. (2019). *5 ways to boost creativity in your business*. Retrieved from <https://www.entrepreneur.com/article/270157>.
- Rogers, D. L. (2016). *The digital transformation playbook: Rethink your business for the digital age*. Columbia University Press.

- Scy, Z. (2016). *Is creativity a skill or an innate quality?* Retrieved from <https://www.quora.com/Is-creativity-a-skill-or-an-innate-quality>.
- Sherman, F. (2019). Retrieved from <https://bizfluent.com/info-8471685-advantages-disadvantages-innovators.html>.
- Siu, E. (2016). *10 lessons startups can learn from Uber's growth*. Retrieved from <https://www.singlegrain.com/blog-posts/business/10-lessons-startups-can-learn-ubers-growth/>.
- Solomon, Y. (2018). *2 reasons why creative people work in startups*. Retrieved from <https://www.inc.com/yoram-solomon/2-reasons-why-creative-people-work-in-startups.html>.
- Soulsby, T. (2019). *Advantages & disadvantages of innovation*. Retrieved from <https://getrevising.co.uk/grids/advantages-and-disadvantages-of-innovation>.
- Sousa, M. J., & Rocha, Á. (2019). *Strategic knowledge management in the digital age*. JBR Special Issue Editorial.
- Taylor, K., & Silver, L. (2018). *Smartphone ownership is growing rapidly around the world, but not always equally*.
- Verhoef, P. C., Kooge, E., & Walk, N. (2016). *Creating value with big data analytics: Making smarter marketing decisions*. Routledge.
- Weill, P., & Woerner, S. L. (2018). *What's your digital business model? Six questions to help you build the next-generation enterprise*. Boston, USA: Harvard Business Review Press.
- Williams, R. (2019). *Google glass will make 'privacy impossible' warn 'Stop The Cyborgs'*. Retrieved from <https://www.independent.co.uk/life-style/gadgets-and-tech/news/google-glass-will-make-privacy-impossible-warn-stop-the-cyborgs-campaigners-8550499.html>.
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18(2), 293–321.
- World Economic Forum. (2018). *The future of jobs report 2018*. Geneva, Switzerland: World Economic Forum.
- Yoo, Y. (2010). Computing in everyday life: A call for research on experiential computing. *MIS quarterly*, 213–231.
- Zucker, M. (2015). *Transforming your business with digital creativity*. Retrieved from <https://www.forbes.com/sites/matzucker/2015/04/27/transforming-your-business-with-digital-creativity/#3bc127825b75>.

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