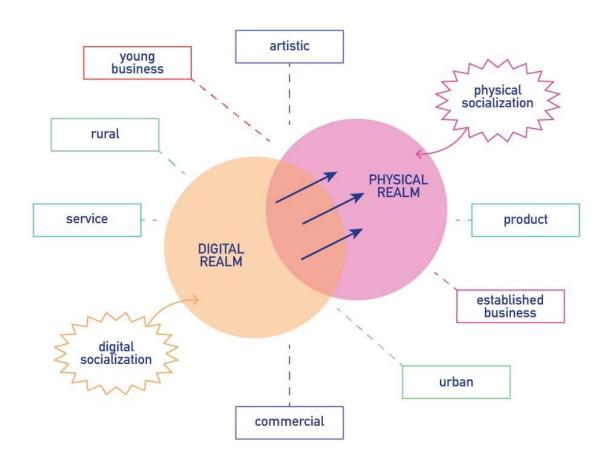
Does proximity still matter?

Digitalization against physical proximity externalities for small cultural and creative businesses of Berlin during and post Coronavirus crisis



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ABSTRACT

The global pandemic of Coronavirus of 2020 has made a tremendous impact on individuals' health and the economy at large. In terms of economic impact, especially smaller cultural organizations have been affected due to the character of their products and service (EY, 2021). Canceled events, lower demands of cultural products, limited capacities at museums and theatres - all forced entrepreneurs to shut down or seek an alternative business strategy. Digitalization has served many on this path as a possible solution in sustaining their business during the pandemic (IDC, 2020). The case of Berlin creative clusters is especially peculiar, as the entrepreneurial eco-system and physical proximity within the cluster allowed cultural entrepreneurs to emerge, grow and thrive in the past. This research investigates digitalization replacing the physical presence of small businesses in creative clusters, and as such is trying to argue that the COVID-19 pandemic has altered the preconditions for cultural entrepreneurship as remote work and migration away from cities is now seen as a norm and allows many entrepreneurs to grow their businesses through digital marketplaces. However, despite of the advantages and opportunities of digital technology for businesses, social ties are still fundamental when it comes to cultural organizations. By means of 11 semi-structured in-depth interviews with cultural entrepreneurs in Berlin, this research aims to shed light on the complex phenomena of physical proximity and digital presence for businesses during the pandemic and forecast future trends and stimuli of cultural entrepreneurship within and outside creative clusters. The conclusions suggest the dependency of entrepreneurial choice of physical representation over digital presence or vice versa on the factors subject to each business described in the interdependencies' model of the findings. Additionally, digitalization is believed not to be a temporary solution but rather a trend that is here to stay in the form of a hybrid business model. Due to the increased migration away from cities, Berlin starts to gain a different atmosphere that impacts the creative clusters leaving fewer spillovers of physical proximity for entrepreneurs.

Keywords

Urban development, Berlin creative clusters, entrepreneurial eco-system, COVID-19, digitalization, physical proximity

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Chapter 1: Introduction

The Coronavirus pandemic has impacted the way small creative and cultural entrepreneurs operate. While physical proximity is believed to matter for cultural entrepreneurship, the reality demonstrates the tendency of businesses to embrace digital entrepreneurship in times of the COVID-19 crisis, disregarding the positive externalities of co-location. It seems that the current crisis is impacting the way small cultural and creative entrepreneurs operate, shifting their priorities to digital transformation, making the physical proximity spillovers inferior.

The global Coronavirus pandemic of 2020 had a massive impact on the economy. Due to imposed governmental regulations on social distancing and limitations on capacities indoors, many businesses had to adapt in order to be sustainable or even shut down for an unpredictable amount of time (Betzler, Loots, Prokupek, Marques, & Grafenauer, 2020). While bigger institutions and organizations could afford to invest in another strategy, such as virtual reality (VR) tours in a museum, or online food delivery, smaller firms and individual entrepreneurs were hit much harder not benefiting from such scale advantages (UNCTAD, 2021).

When it comes to the cultural sector, the industry has been tremendously impacted, first and foremost by the cancelation of all the cultural events, as gatherings were limited or even prohibited during the peaks of the first and second waves of COVID-19 (OECD, 2020). Interestingly enough, many small-scale cultural entrepreneurs managed to sustain their businesses by means of digitalization (IDC, 2020). This implies moving towards digital marketplaces or embracing digital transformation through enhanced digital presence. It is expected that for small and medium-sized enterprises, it comes as a bigger challenge to take advantage of digital opportunities during the crisis, due to their lower budget reserves compared to bigger firms, a limited number of employees and suppliers (in the case when the crisis disrupts the supply chain as it happened during the Coronavirus pandemic), and their underrepresentation in such industries as the cultural and creative economy (Uvarova, & Pobol, 2020). However, Germany is reported to be one of the countries where small businesses accelerated digitization processes due to the challenges of the COVID-19 pandemic (IDC, 2020). According to the Small Business Digitalization and COVID-19 survey by Cisco (2020), Germany is ranked as stage two of digital maternity and a country that scored above average on additional GDP growth (US\$387)

Billion) from digitalization in micro, small and medium-sized enterprises (MSMEs). Berlin, in particular, as a very artistic creative city, is a very stark example of a city in which entrepreneurship was and is thriving.

Since the 1990s, the city of Berlin has been pronounced the new creative capital and attracted creative class from all over the world due to its central location, cultural diversity, and lower rents (at a time) (Lange, 2008). Since the German capital was so welcoming and open to creative individuals and could also recognize them as bringing potential influence on economic growth, the inflow of creative class has been followed by a natural emergence of creative clusters. Especially cultural entrepreneurship started to evolve, a type of entrepreneurship in which cultural and creative workers seek to convert means to desirable ends (Essig, 2015), which is driven by artistic, cultural, and social values, as well as an economic mission (Chang, & Wyszomirski, 2015). It is peculiar to notice that entrepreneurship is blooming best in an environment where businesses from similar industries are in proximity (Florida, 2014). This is evident in such areas of Berlin as Prenzlauer Berg and Kreuzberg, where many small and medium-sized businesses benefit from co-location (Heebels, & van Aalst, 2010).

However, in times of the Coronavirus crisis, it can be expected that many businesses were forced to opt for digital technologies, to the environment where physical proximity seems to play a secondary role in the overall performance of the business. Florida (2020) also argues that the pandemic has driven many people to move to rural areas and continue their business online, and with increasing demand and supply of online job opportunities, this seems to be the future tendency. Berlin has experienced a rather brutal hit when it comes to Coronavirus infection cases. The Federal Ministry of Health, together with the Robert Koch Institute, has been very strict on the imposed regulations towards small local businesses. Such measures included strict lockdown, space capacities, and social distancing (Robert Koch Institut, 2020). This has had a tremendous impact on cultural entrepreneurship, which resulted in many businesses drifting towards a more profitable temporary online strategy or a potential shift of the business from physical to digital for good (ITC, 2020). It could be noticed that small businesses started to see more opportunities in digital entrepreneurship (EY, 2021; Muttaquin, Purbasari, & Sari, 2021), as companies could not rely on the physical offering of cultural and creative products and services anymore. With more people locked in their houses, the demand for cultural goods has increased, which can be seen as another opportunity for entrepreneurs to explore

digital offering (OECD, 2020). This phenomenon leads to an assumption that the benefits of physical proximity become inferior for small cultural and creative entrepreneurs, as digitalization crowds out the proximity spillovers while still allowing entrepreneurs to thrive in the digital environment.

This research aims to analyze to what extent physical proximity plays a role in the overall business performance of small cultural entrepreneurs in creative clusters of Berlin. It also strives to clarify if digitalization replaces physicality in creative MSMEs or whether the social aspect of businesses is still vital during and after the Corona crisis. Physical proximity or co-location to businesses in a creative cluster is known to enhance the emergence and stimulate the growth of entrepreneurship (Hitters, Bhansing, & Wijngaarden, 2020), especially when it comes to cultural and creative industries, which are characterized by symbolic goods, high level of human creativity and intellectual property (Throsby, 2008). By means of qualitative interviews with ten representatives of small cultural businesses or individual cultural entrepreneurs (1-20 people, offering cultural products or services), and one interview with an expert from the field, this study aims to clarify whether the belonging to a creative cluster still fosters entrepreneurial activity and growth, also in the times of economic crisis. As argued by Florida (2014), in his discourse of creative class, Berlin seems to be a perfect representation of the case where entrepreneurship flourished within a creative cluster. Due to the fact, that physical contact has been limited due to the COVID-19 pandemic, this study seeks to evaluate how businesses manage to sustain themselves online and whether digital marketplaces are sufficient to fulfill their revenue goals and non-monetary values equally. The participants of this research belong to the community of Creative City Berlin, amongst other sources. Employing coding mechanisms corresponding with the theoretical framework of this study, these were analyzed and resulted in conclusions accordingly. The expectation of this research is that there might be no need for physical proximity anymore for cultural entrepreneurship to evolve. The importance of social interaction, networking, and community might still be stirring those cultural businesses away from solely digital offering or presence.

As a consequence of this research, entrepreneurs could benefit from applying the results to their entrepreneurial practice, as well as gain a better understanding of market dynamics in times of crisis in the city of Berlin or any other location. Secondly, as there has not been much research yet on the recent Coronavirus crisis in connection to cultural entrepreneurship in Berlin

and physical proximity externalities, this discourse serves as a contribution to the academic literature and adds to future research on the topic.

This dissertation is composed of six chapters: introduction, literature review, methodology, findings, discussion. The theoretical framework is designed to give a background on the academic discourse on the topics of creative clustering, digital entrepreneurship, entrepreneurial eco-systems, the COVID-19 pandemic, and the creative city of Berlin. The literature review is followed by the operationalization of the research questions by means of the research design method part of this study. The central part of this review discusses the main findings in relation to the theoretical framework. Lastly, the discussion part suggests the interpretation and analysis of the findings, followed by the conclusion of the findings, accompanied by limitations and suggestions for future research.

Chapter 2: Theoretical framework

2.1. Introduction

In order to address the complex phenomenon of geographic clustering of cultural industries as well as its development, growth, and strategies during times of crisis, a thorough literature review is to be conducted. The theoretical framework of this research analyses the concept of creative clustering in cities and the criticism on it, followed by a review on digital entrepreneurship and entrepreneurial ecosystems as a part of creativity and the innovative strategy in small firms. Consequently, the case of Berlin is being reviewed as an example of a city in which the creative economy has longer flourished (Lange, 2008). Economic crisis that emerged through the COVID-19 pandemic is then put into context with the cultural entrepreneurship of Berlin.

There have been numerous studies on the subject of the creative economy in the past decades. It had become important when economists and governments realized the impact creative industries play on the welfare of society. Cultural entrepreneurship, therefore, was recognized as a type of entrepreneurship vital for cities, as it increases the attention to cities attracting the creative class and stimulating the economic growth of the region (Pratt, 2010). Creative clusters were recognized as imperative for creativity and innovation to emerge, followed by entrepreneurial ecosystems appearing in cities stimulating even more significant advancement. Digital transformation, in turn, has made a tremendous impact on how businesses operate both within and outside of cities (Laundry, 2008). It has become normalcy to run fully digitalized firms, and a must to have some kind of digital presence for companies to be representative. In the Coronavirus crisis, when physical contact was not possible anymore, digital entrepreneurship played a crucial role for small and medium-sized enterprises (EY, 2021). In order to shed light over the influence of this phenomenon on the well-established cultural agglomeration in Berlin, a deeper theoretical analysis of the prerequisites is imperative.

2.2. Creative clustering

2.2.1. *Creative cluster theory*

According to the author of the expression "creative class", Richard Florida (2014), human creativity plays a crucial role in economic and urban development. The so-defined *creative class*,

including scientists, engineers, architects, designers, artists, musicians, and other creative professionals in related industries, sets the foundation of a creative economy. As long as creativity is considered to be at the core of innovation and a fundamental element for the emergence of new firms, it is also at the core of the growth of creative cities (Pratt, 2010).

Nevertheless, creative cities do not just emerge. It all starts with clustering, which can be defined as an agglomeration of different firms that benefit from each other's proximity and enjoy positive externalities and spillovers from being located in the same place (Lorenzen, & Frederiksen, 2008). Clustering occurs in both urban and rural contexts. Initially, when factories did benefit from physical proximity, clustering primarily appeared in rural areas, which is referred to as localization economies (Gong, & Hassink, 2017). Alfred Marshal (1920) first defined such a phenomenon as "industrial districts," or commonly known as industrial clusters, the concentration of specialized companies in a specific location. Such companies could benefit from the proximity of the supply chain, shared knowledge, and customers (Porter, 1998). In addition, clustering allowed for the more effortless flow of information and ideas, reduced transaction costs, and a local specialized labor force pool (Marshall, 1920). However, today clusters can be noticed in cities too, which are referred to as urbanization economies (Gong, et Al., 2017). They comprise and are not limited to such agglomerations as business centers, tech hubs, or creative clusters. In creative clusters, firms benefit from spillover effects and resources such as identity, image, reputation, learning, and community support (Hitters, et Al., 2020). Scott (2009) argues that creative agglomeration in cities allows for informal contacts, interfirm labor migration, and influence entrepreneurship by means of a flexible workforce, creativity, lower labor costs, and higher productivity levels. Creative clusters are also known for the social relationships within them and the informal information exchange, which enhances the collaboration and growth of the companies within those clusters (Pratt, 2010).

For the purpose of this research, it is vital to review the urbanization economies and the type of clustering that occurs within cultural and creative industries (CCIs) in cities. On the one hand, there are particular prerequisites to cultural clustering, which involve a degree of artistic milieu, the wealth of the city, and its diversity (Florida, 2014). Creative cities are also comprised of a variety of cultural organizations that stimulate the artistic process and creative conversation (Moss, 2017). As the acclaimed urbanist, sociologist, and journalist Jane Jacobs (1961) argued, such cities are also walkable and possess many opportunities for social interaction and a healthy

mix of residential and commercial spaces. These are the cities with a certain degree of aesthetic curiosity and a peculiar look and feel, which are appreciated by the creative class, making them attracted to them (Jacobs, 1961). On the other hand, the city also has to have opportunities for development and improvement, as well as some kind of instability and intellectual turbulence, so that there is an apparent need for growth and change (Hall, 2000). Thus, creative clusters are argued to be of tremendous value for local development and economic growth (Holm, & Pederson, 2000). The CCIs play a significant role there, as, due to the co-location, businesses engage in a direct stream of knowledge exchange, networking, competition, and, therefore, lead to economic growth. Consequently, creative clusters contribute to employment growth (Potts, 2009), and to the development of innovation and digital technologies (Landry, 2008). In short, the environment that creative clusters in cities allow for businesses is much more stimulating to entrepreneurship and entrepreneurial growth compared with non-urban environments (Florida, 2014).

2.2.2. Criticism on clustering theory

While the theories on cultural agglomeration have received much support from academics and policymakers, several studies have contrasting arguments that are vital to highlight. Ganesan, Malter, and Rindflesch (2005) argued against clustering theory, claiming that face-to-face communication stimulates knowledge transfer but does not result in new product development. They also argue that digital communication provides opportunities for higher creativity when creating a new product and can accelerate delivery processes. The findings of their research imply that entrepreneurial innovation, which is typically connected to physical proximity, has an effect mostly when strong relational ties are in force.

However, it is apparent how cultural entrepreneurship does not necessarily evolve in clusters in the digital age. The father of clustering theory, Richard Florida, has recently introduced the idea that remote working will be shaping future cities. He claims that with the increased demand for digital work during the Coronavirus pandemic and an expanding supply of online jobs, neither companies nor individuals will have the necessity to live in cities anymore. This will, in turn, strengthen the infrastructure of smaller towns and communities, as well as change the mindset of companies and the global economy (Florida, & Ozimek, 2021). Reuschke, Long, and Bennett (2021), analyzing the digital activity of the creative class in relationship to their location,

show that most creativity happens in residential areas rather than in the city center. They concluded that, with the COVID-19 pandemic forcing freelancers and entrepreneurs of CCIs to be physically isolated, the city must foster creativity and innovation outside creative clusters (Reuschke, et Al., 2021). It remains to be seen how, due to the global pandemic of COVID-19, digitalization has or will become an inevitable part of cultural and creative entrepreneurship. Therefore, it is of core importance to investigate to what extent this phenomenon is temporary or could potentially be a change in perspective of how entrepreneurial dynamics in cities shall evolve in the future.

2.3. Digital entrepreneurial ecosystems

2.3.1. Entrepreneurial ecosystems

A creative cluster where companies benefit from being located close to one another may also be referred to as an entrepreneurial ecosystem (EE). An ecosystem can be defined as an environment consisting of "interacting components, which foster new firm formation and are associated regional entrepreneurial activities" (Mack, & Mayer, 2015, p.1). The entrepreneurial ecosystem framework allows policymakers not solely to be looking at improving one aspect of the city, but rather at all the components of the ecosystem: formal institutions, culture, physical infrastructure, demand, networks, leadership, finance, talent, new knowledge, and intermediate services (Stam, 2020). The combination of the abovementioned factors sets a solid ground for entrepreneurial growth and prosperity and, furthermore, economic development. This is a particularly interesting phenomenon for this research, as it overlooks the dynamics of cultural entrepreneurship within creative clusters, adding up to its importance for the city.

2.3.2. Digital entrepreneurial ecosystems

Keeping the fact in mind, that clustering theory is grounded within the benefits of physical proximity for entrepreneurs, it is peculiar to see how the dynamics are changing hand in hand with digital technology development. Innovation has been a buzzword for a while now. The father of innovation and entrepreneurship, Schumpeter (1942), argues that entrepreneurship comes from innovation and technological change. Many firms now acknowledge process and product innovation, and creativity as the recipe for growth and success (Marzi, 2018)

Digitalization, commonly known as digital transformation, refers to integrating digital technology into the business, making its operation fully or partially digital. As sociologist Sharon Zukin explained in her webinar on Urban Innovation Complex (2021), every industry is being digitalized to a certain extent, similar to every industry using electricity back in the days. Today, digitalization, as a means for innovation, brings many advantages to businesses and some drawbacks (Yoo, 2010). To begin with, digitalization allows for cost reduction, as no physical stock is required. It also reduces search and information costs for consumers, as they can access all kinds of information about the potential products or services they wish to buy online (Pratt, 2013). The competition forces are strong as digitalization implies information asymmetry and due to the vast heterogeneity of cultural and creative goods at the market because of low entry barriers (Towse, 2019).

It seems that in order to be successful as an entrepreneur, one should constantly be innovative. Digital entrepreneurship can be seen as an output of the digital ecosystem; it is defined by entrepreneurs establishing digital companies broadening the scope of their customer base within a digital ecosystem and, therefore, in the global economy (Mattaqin, et al., 2021). The digital entrepreneurial ecosystem focuses on platforms, users, and digital institutions (Acs, & Sussan, 2017), distinguishing it from the common approach to entrepreneurial ecosystems in the literature, as its scope is not tied to a specific location. Especially in the age of the global Coronavirus pandemic, disrupting supply chains, and the efficiency of SMEs (small and medium enterprises), digital entrepreneurial ecosystems have become even more crucial for entrepreneurs (Mattaqin, et al., 2021). Digitalization slowly replacing physical proximity certainty offers efficiency advantages, which could be, however, diminished by the lack of personal approach, as pixels do not replace objects and monitors do not replace people, especially when it comes to culture. If firms exploit digital opportunities and opt for digital marketplaces instead of physical ones, they might benefit from economies of scale, cost reduction, and efficiency (Towse, 2014). However, that does not translate into the fact that physical contact with consumers and social interaction with other businesses within one's network play a secondary role in today's world.

2.3.3. Digital entrepreneurial ecosystem in CCIs

The advantages of digital entrepreneurship contradict the theory on physical proximity playing such a crucial role in the growth and development of entrepreneurs in a creative cluster and

entrepreneurial ecosystems. The key difference between physical clustering and digital entrepreneurial ecosystem is that physical interaction is minimal or absent at all in the latter. There has been little research on this apparent gap, so it is vital to shed light on this phenomenon within existing academic and scientific research.

Indeed, by means of digital entrepreneurship, businesses are able to gain access to other markets and save costs on physical representation, focusing mainly on a digital image (Mattaqin, et Al., 2021). However, there are a few arguments against digitalization, particularly in the cultural and creative industries.

First and foremost, cultural products are often characterized by symbolic value, aesthetic or educational function, or even intellectual property (Throsby, 2010). As the above-mentioned factors are strictly subjective and, it is also hard to establish the demand for such goods (Towse, 2014). Still, the cultural value of such goods outweighs the commercial value, which supports the argument that cultural entrepreneurs shall treat commercial goals as inferior. Cultural and creative industries differ from regular capitalism, where private ownership and production for profit are of prime and mostly sole importance (Scott, 2009). Cultural cognitive society is rather motivated by intrinsic values and creating goods for the good of society and not solely for the commercial value (Scott, 2009). The cultural and creative industry is a particular example of such a society.

While digital entrepreneurial ecosystems might allow for more efficacy, physical ecosystems allow MSMEs in CCIs to better fulfill their social and cultural values, alongside with economic ones, as physical aspect is connected to a personal approach, social values, having the ability to feel and see the product or interact with a creative individual offering a service. Therefore, using digitalization as means of efficacy creation substitutes the social aspect of the cultural business. However, as digital technology develops, more and more industries become dependent on it. Some see digital transformation as a means supporting their physical image, while others consider it to be a radical innovation, supposedly changing our mindsets on how CCIs could operate and replacing physicality completely. It is hard to deny how this is especially evident in the times of Coronavirus crisis when digitalization is mostly the one and only solution for both MSMEs and bigger enterprises, as in order to sustain their businesses, some MSMEs had to move their offering to the online environment, while not being able to physically interact with clients and customers (EY, 2021),

While digital transformation may seem the most efficient solution for many small and medium-sized businesses in the cultural and creative industries, institutional logic theories beg to differ. Digitalization can be viewed as a tool supporting an organization's business logic, which may, in turn, result in a sufficient adaptation of technology complementing the cultural practice, or else, replace the physical representation completely, which might constrain the artistic vision and cultural values of the business. Hence, it has regularly been articulated that CCIs are typified by tensions between commercial and artistic logics (Eikhof, & Haunschild, 2007). Economic logic, the one with the ambition to pursue commercial goals, crowds out the artistic logic. While cultural entrepreneurship is known for its strong accent on cultural values, it becomes apparent that the reduction or elimination of artistic logic is undesirable. Also, according to Bourdieu in his discourse on cultural capital and logics of practice, the more economic logic a cultural organization has, the more it starts to operate on demand and for the market, adapting its dynamics (Bourdieu, & Nice, 1992). Artistic logic of practice, or *l'art pour l'art*, shall serve as the primary intention for a business. Klamer (2017) would complement this idea, stating that art is not for sale and shall not be commercialized. The values that a cultural entrepreneur realizes through their end product or service must not be limited to capitalism. Abbing (2019) argued that commerce in arts is a phenomenon leading to wrong values and adaptation to demand forces of the market, leading to the absence of negative liberty. Suffice it to say, that cultural organizations may enter a conflict of interest between commercial goals and artistic autonomy. In the case of cultural goods and services, sometimes the lack of physical offering is undervaluing the product or service itself. It can also be viewed as impersonal and untrustworthy, as cultural and creative businesses deal with people's emotions and values, which are hardly detachable from the social aspect (Potts, 2009).

Nevertheless, in the times of the global pandemic, when physical spaces like offices, shops, warehouses, studios, showrooms and else, could not be functioning, digitalization could have served as a means towards an alternative strategy in times of crisis. The next chapter shall reveal the circumstance put into context.

2.4. The economic crisis related to the COVID-19 pandemic

The global pandemic of 2020 caused by the Coronavirus has brought much uncertainty for many individuals and organizations. Rising cases of infections, border closure, lockdown, self-

isolation, governmental regulations on closure of public places and businesses, second and third waves of COVID-19, and many other keywords could be associated primarily with a globally unsafe health situation but also with a tremendous impact on the world's economy.

The cultural and creative economy has been one of the most affected industries in Europe, somewhat less than air transport and even more than tourism, with a loss of 31% in turnover globally (EY, 2021). Due to the imposed regulations on social distancing and limited capacities at public indoor spaces, most of the events had to be canceled: theatre, opera, and music performances were canceled, museums could only allow reservation of timeslots per visit, and more. However, some organizations soon realized that it was time to act, as the industry would take a long while to get back to normal, so it is better to adapt to the new "normal". SMEs were led to invest more resources into their digital presence and discovered online opportunities, along with many other parts of the economy moving towards digital platforms (ITC, 2020). COVID-19 has had a massive effect on the entrepreneurial activity as well, due to the decline in economic activity and lack of sufficient governmental funds for small businesses (Mason, & Hruskova, 2021). According to the Cultural Climate Barometer survey, 46% of the respondent ranked cultural entrepreneurship as the "number one issue" underprioritized by European governments (EY, 2021). However, in the lockdown situation, the demand for both online and offline cultural goods also increased, as people were forced to stay indoors and were searching for alternative ways of entertainment (OECD, 2020). Due to the disruption of supply chain and border closure, many small businesses had to suffer subsequent revenue losses; others could simply not trade offline anymore, so they had to work on their e-commerce. Some suppliers already had a webshop and started to invest more strongly in their online audience through virtual events, social media campaigns, artificial intelligence, virtual reality, or other alternative market opportunities (OECD, 2020). This led to many classic services being offered online instead of physically at the point of purchase. It is still to be seen to what extent this alternative strategy has only been a temporary solution to the limitations and challenges imposed by the virus, or whether it might have served as a door opener and a market exploration strategy that will evolve into a more efficient organization in the future. Still, some organizations may also experience a type of mission drift, when concentrating too much on the financial side of their businesses and remaining online only also after the pandemic (Jones, 2007). As cultural organizations are known for their conflicting business and artistic logics (Eikhof, et Al., 2007), in the

circumstances of the crisis, it becomes easy to drift towards a more commercial mindset, opting for an efficient option to sustain the business. This, in turn, does not necessarily go in line with the initial company's cultural visions. To what extent this can be considered a necessary temporary measure rather than a mission drift scenario is indeed case specific and will need a case-based approach.

2.5. Berlin: Case Study

2.5.1. Short historical overview

In order to examine the phenomenon of whether digitalization crowds out the initial need or benefits of urban clustering in CCIs, Berlin has been chosen for a case study. The reason for this choice is behind the history of the German capital, and the dynamics of CCIs there at the moment, as well as the author's familiarity and curiosity about the city itself.

After the fall of the Berlin wall in 1989, the German capital started to experience a massive inflow in population and economic growth. The reason behind this change was, for one, the existence of many vacant spaces for artists, moderate prices at a time, and low rents. In the early 2000s, after the election of the mayor Klaus Wowereit in 2001, who has openly stated, "I am gay, and that's a good thing", the city has become even more tolerant, hip, and cultural (Connolly, 2001). This attracted a lot of designers, artists, writers, and other creatives, due to Berlin's diversity, internationality, dynamic cultural atmosphere, young population, just to mention a few reasons (Lange, 2008). Later in the decade, many big media and entertainment companies moved their headquarters to Berlin, such as MTV and Universal. Berlin was further named a city of design by UNESCO, and initiatives such as ProjektZukunft and Creative City Berlin followed shortly after (Lange, 2008).

2.5.2. Berlin's creative clusters

Today, the German capital is ever more attractive to the creative class, tourists, and students who wish to be surrounded by a vibrant atmosphere or nightlife and culture. Many people move there in order to embrace the versatility of culture, local community, meet like-minded people or future business partners. Many areas have been fully regenerated from empty factory buildings and vacant urban spaces into design and architecture hubs, co-working spaces, galleries, studios,

restaurants, and bars. A typical example of such clusters would be Kreuzberg or Prenzlauer Berg (Heebels, et Al., 2010).

Berlin, as the largest municipality in Germany, has the largest number of cultural and creative companies (Federal Ministry for Economic Affairs and Energy, 2019), it contributed 8,5% to Berlin's gross value added in 2014, which is just a bit below manufacturing industries, as can be seen in Figure 1 (Senate Department for Economics, Technology and Research, 2014).

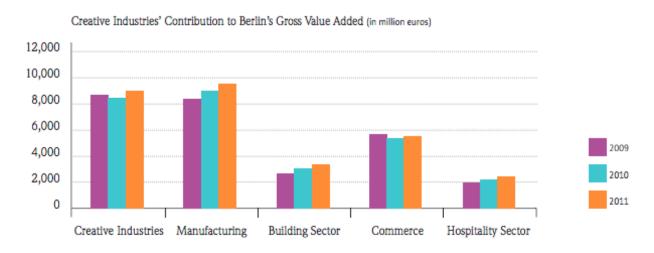


Figure 1 – Creative Industries' Contributing to Berlin's Gross Value Added (in million euros) (Senate Department for Economics, Technology and Research, 2014).

Berlin's creative economy comprises eleven primary industries: music, broadcasting, film, design, books, print media, advertising, art, performing arts, architecture, and software development. The city is also known for its open environment for entrepreneurship and an immense tech start-up ecosystem (Hodgson, 2019).

Most of the cultural industries of the city are located in the central area. Figure 2 displays the areas of creative clusters. These include Mitte, the central area which has become a very well established and prestigious; Prenzlauer Berg, which may be viewed as a combination of residential areas and commercial spaces; Kreuzberg, a well-established location for creative industries, which is spilling over now to Neukölln, Alt-Treptow and Mitte; Friedrichshain, as a growing creative center; Berlin West and Charlottenburg, developing as a remote creative center; and Schönerburg, which has been growing as well (Senate Department of Economics,

Technology and Research, 2014).

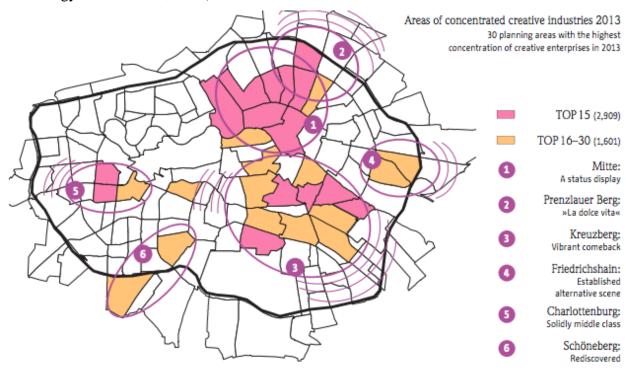


Figure 2 – Areas of concentrated creative industries 2013 (Senate Department for Economics, Technology and Research, 2014).

As more and more people were attracted to the "Creative City Berlin", the entrepreneurial ecosystem started developing, allowing for all sorts of businesses, no matter how digital or how international they were, to emerge, develop and thrive. Consequently, with the continuous new job creation, unemployment decrease, and steadily growing added value, Berlin has become an ever-thriving and growing ecosystem for both entrepreneurs, creative class, and technology workers (Senate Department for Economics, Technology and Research, 2014).

2.5.3. Berlin during the pandemic

Things changed dramatically in the times of the Coronavirus pandemic. Berlin's mayor Michel Müller acknowledged in an interview that micro-enterprises are vital for the economy, and they were struck by the crisis, especially those in the cultural and creative industries (Cities Today, 2020). Many businesses went bankrupt; others had to adapt to the sudden change in circumstances. A small local perfumery, Apotheke Perfume, for instance, switched to producing

scented hand-sanitizers instead of perfumes; a juice bar, Bttr, turned into a low emissions beverage distributor; and a local designer, Ylenia Gortana, started sewing face masks (Waters, 2020). When it comes to the product offering, it is relatively foreseeable that brands also move online and start discovering digital marketplaces and consequently a broader audience. It is not entirely evident yet, to what extent this change is significant in the case of Berlin, as no research has been conducted on this just yet.

Florida (2020) suggests that COVID-19 has irreversibly impacted most of the bigger cities, such as New York and London; people started to avoid public transportation and use bicycles more often, which is significant from a sustainability standpoint but also implies possible future city planning changes. Also, he claims that working online does not make people place-dependent anymore, which could possibly be an argument for future migration away from cities (Florida, 2020). He predicts there would be no more reason to be paying high rents if the work can be done from anywhere in the world.

However, the cultural and creative industries are known for their strong dependency on social and cultural values. Even in the more commercialized creative sector, such as design, architecture, and fashion, the higher mission, the aesthetic, and the symbolism are generally at the core of the business. This is in turn complemented by the economic value, as entrepreneurs also need to have the means to sustain their business. The conflict between the need to sustain the business through digitalization and the core ambition of businesses still to follow their initial mission and artistic and social values seems to be present in the pandemic situation. Whether the value conflict increased through digitalization in the times of the pandemic is a manifestation of mission drift or a core change of perspective to how physical importance within CCIs is viewed still remains to be seen. This research will attempt to shed light on the complex phenomenon of digitalization, crowding out the externalities of physical proximity in creative clusters of Berlin during and post Coronavirus crisis.

Chapter 3: Methodology

3.1. Research method and design

This part provides an explanation about the research strategy and the method used to gather the empirical data of this research. The main objective of the current research is to evaluate whether the digitalization of small and medium-sized cultural entrepreneurs in creative clusters of Berlin during the global Coronavirus pandemic replaces the importance of physical proximity for cultural entrepreneurship in a physical ecosystem. According to the literature review, some recent research makes apparent the deviation from the theory proposed by Florida and other contributors when it comes to the importance of urban agglomeration for CCIs. As the research on the topic of the Coronavirus pandemic is still somewhat limited, due to the latter being a rather recent event, there is an urgency for empirical study.

Qualitative research has been selected as a methodology, as this type of analysis has been proven to be more interpretivist in comparison to quantitative methods (Bryman, 2012). Therefore, by means of semi-structured interviews, the respondents will be able to share their opinions, experiences and knowledge on the matter, but also reveal motives, strategies and predictions in relation to cultural entrepreneurship in Berlin during and after the pandemic.

The topic in question calls for an in-depth analysis and Hermeneutics approach, as it is very case-specific (Babbie, 2016). By means of inductive reasoning, patterns shall be discovered from empirical observations, leading to the development of theories. As the type of analysis has a lot to do with people, opinions, and values of each individual, ideographic type of explanation shall serve as an approach towards such information analysis. The research calls for a deeper understanding of each individual case, which can be accomplished by means of "verstehen" and interpretivist approach, as social sciences are known for their subjective character (Dooremalen, Schouten, & de Regt, 2007). As Berlin was selected as a case study, the theoretical concepts and geographical peculiarities, and cultural background were studied, followed by analyzing the phenomenon of digitalization crowding out physical proximity externalities at the location itself.

Many academics had made a choice of qualitative methods for their research when it had to do with geographical clustering and entrepreneurial ecosystems (Mack, et Al., 2015; Neck, Meyer, Cohen, & Corbett, 2014). This explanatory type of research aims to gather qualitative insights from Berlin, as cities are unique and can be better supported with personal experiences

and observations. First, this thesis collects valuable insights through a thorough literature review on geographic clustering, entrepreneurial ecosystem, and COVID-19 crisis. Secondly, the assumptions and expectations are made through that theoretical paradigm. The expectation of this research is that digitalization indeed shifts the perspective on the urban planning of cities in connection to creative clusters, as digital opportunities offer more efficient and effective strategies for entrepreneurs nowadays. However, the social factor is expected to still play a significant role for entrepreneurship in the CCIs, as monetary values are not the only ones believed to be at the core of such organizations (Scott, 2009). Social and sustainable entrepreneurship is exemplarary to support this point. Relationships, networks, experiences, and intrinsic values are believed by the author to be fundamental when it comes to cultural and creative firms (McKelvey, Lassen, 2013). The latter shall not let the creative class be crowded out to the online world with absolutely no human interaction. Due to the apparent gap in the academic and scientific literature, this research aims to build empirical evidence by means of identifying common patterns in the narratives of Berlin entrepreneurs of creative clusters in order to produce meaningful results based on the cause and effect relationships.

However, qualitative research methods are not flawless and include several limitations. Ideographic type of reasoning creates an artificial situation in which the respondents could be biased or could act differently to the way they would in a normal setting (Bryman, 2012). As Hermeneutics aims to assess each individual case fully, each empirical evidence is subjective and strongly depends on the respondent's competence, interest in the research, and awareness (Babbie, 2016). Lastly, "verstehen" cannot be proved, as valid knowledge cannot be reached by means of subjectivity (Dooremalen, et Al., 2007).

Nevertheless, in order to guarantee the internal validity of this research, the respondents are provided with the results upon completion of this thesis. In addition, different opinions and constant connection to the theoretical framework of this research shall allow for further validation of this study.

3.2. Units of analysis

This section provides an overview of the units of analysis and the systematic of how these were selected. The empirical part of the present research is based on 11 in-depth semi-structured interviews with cultural entrepreneurs of Berlin. Taken, the goal of this study is to establish the

dynamics of CCIs within creative clusters; the territory had to be mapped precisely. The city center and the formerly defined creative clusters were selected to narrow down the scope. Therefore, units of analysis were necessary to identify in order to operationalize the objectives of the current research.

A group of small and medium-sized cultural and creative entrepreneurs in related cultural and creative industries has been selected for the interviews. Due to the fact that strategic decisions and financial capabilities vary significantly between small companies and big enterprises, the scope of this research has been limited to micro and small businesses (1-20 employees). In addition, Throsby's related industries have been made a focus of this study due to the stronger commercial side of their mission (2008). The important note here is that the businesses are not funded, subsidized, or invested in, as this might steer away the necessity of financial stability and deviate from the digital strategy. Such industries as fashion, design, media/print, architecture, advertising have been considered. The potential interviewees had to be knowledgeable about the market tendencies and the strategy of the company, so either CEOs or employees in managing positions have been interviewed, as this research tried to tackle motives, opinions, experiences, and predictions in relation to entrepreneurship in CCIs in clusters.

In order to establish a sample from the pool of entrepreneurs in Berlin, non-probability purposeful sampling has been applied. The population has been scanned according to three characteristics: entrepreneurs in related CCIs, located in Berlin create clusters, 1-6 employees. Due to the peculiarity of the sample and the impossibility of the researcher to be physically present in Berlin, the search was done through walking the streets of Google Maps, as the location of businesses was vital. Also, such websites as Creative City Berlin and ProjektZukunft were used to enlarge the scale of the initial interview requests. In addition, Erasmus Alumni living in Berlin have been contacted and asked for either participation in the interview or referral to fellow creatives in Berlin. Of overall 72 people contacted, 11 agreed for an interview, which makes the conversion rate ca. 16%. A limitation of the sample selection could potentially be the unreachability of the respondents, as entrepreneurs are, by nature, busy people. In addition, an expert interview has been conducted with an expert from the creative industry and digitalization. The company is medium-sized but well-established and known in Berlin festival, which has seen digitalization in times of pandemic as very advantageous; therefore, the opinion of the director comes as an expert judgment and shall serve as additional input for the findings of this research.

Due to the fact that the cultural and creative industries have a broad spectrum of activities and disciplines, it was essential to keep the sample diverse. Therefore, the final sample of this research can be seen in Table 1.

Table 1 − Interview participants (anonymized)

Respondent	Industry	Location	Size	Space
Respondent 1	Jewelry	Prenzlauer	1 person	Co-working
	design	Berg		space
Respondent 2	Sweaters	Prenzlauer	6 people	Office
	design	Berg		
Respondent 3	Illustration	Kreuzberg	1 person	Co-working
				space
Respondent 4	Graphic	Kreuzberg/	1 person	Co-working
	design	Mitte		space
Respondent 5	Handbag	Prenzlauer	3 people	Office /
	design	Berg		showroom
Respondent 6	Dress	Potsdamer	1 person	Homeoffice
	design	Platz		as of COVID
Respondent 7	Interior	Kollwitzkiez	4 people	Store/
	design			showroom/
				office
Respondent 8	Interior	Kreuzberg	1 person	Co-working
	design			space and
				home office
				as of COVID
Respondent 9	Cultural	Mitte	6 people	Co-working
	agency			space and
				office
Respondent 10	Fashion	Charlottenburg	1 person	Atelier
	designer			

Respondent 11	Festival	Kollwitzkiez	20 people	Office
Expert				

3.3. Data collection

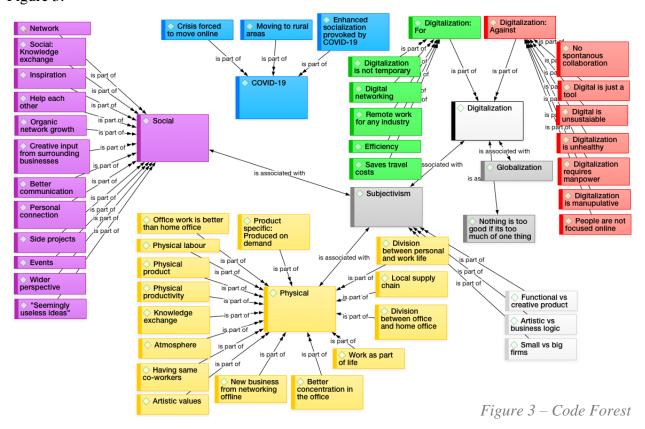
This section explains how the empirical data for the current research has been collected. In order to meet the objectives of this study, the data had to be collected in an organized manner. As semi-structured interviews have been selected as a methodology of this research, the interview guide could be developed in a relatively flexible manner, allowing the researcher to dwell deeper into valuable insights, ask additional questions, and/or make respondents elaborate on specific points (Bryman, 2012). Altogether, 12 interviews with cultural entrepreneurs of Berlin have been conducted, each of them amounting to approximately 45-60 minutes. The potential respondents have been contacted by email, and upon interest in the research interview, were offered a few time slots for an online call, according to their availability. Most of the interviews were made through Google Meets; one of them was made through WhatsApp, as it was more convenient for the interviewee. All the respondents have been made aware of the consent policy of the Erasmus University and the current research before the start of the interview. The recordings of the interviews have been made upon respondents' agreement, which is also confirmed by means of signed consent forms in Appendix A. The timeframe in which the interviews were made amounts to approximately one month, from March 25 to June 7.

Before the interviews took place, a thorough interview guide has been prepared; see Appendix B. All the questions have been formulated in a way to resemble the theoretical framework, the replies to which would either support the theory, alter or add up to it. The questions were open-ended and constructed in a way to avoid the researcher's bias, namely, generally asked and not leading towards supporting or negating a specific theory. All of the interviews have been completed in English, which could be considered a limitation, as a few interviewees could have expressed their opinions better in German. The transcription of the interviews was made with the support of Otter.ti and Tactiq software.

3.4. Data analysis

This section provides valuable insights into the systematics of empirical data analysis, tools, and techniques used to concisely operationalize the data. This thesis uses thematic analysis to search for the common patterns while analyzing the empirical data provided by the interviews (Bryman, 2012).

First of all, the transcripts of each interview have been read and edited several times to ensure the clarity of the text and to recognize common patterns between the respondents. Highlighting and commenting on several passages of the transcripts have been very helpful, as it allowed for immediate relation to the theory. The passages then have been operationalized by code words; this was enabled utilizing ATLAS.ti. Having the interview guide resemble and correspond to certain aspects of the theory has facilitated code generation; the initial question versus code correspondence can be viewed in the operationalization table in Appendix C. For instance, the question "What changed in the strategy of your organization during the pandemic?" corresponds to the code "crisis management". Having created all the code names corresponding with the theory, the sub-codes and newly emerged codes have been added to the code forest, Figure 3.



The code forest has facilitated a coherent analysis of the findings, allowing for a structured interpretation of the findings in the next section.

Chapter 4: Findings

4.1. Introduction

The findings of the empirical data collection by means of semi-structured interviews have brought a variety of input. While all of the respondents already had some online presence, others started to work on their online offering and seek alternative software and technologies to enhance their customers' digital experience. While many agreed that digitalization is a must for most common businesses, the extent to which every process has to be automated varies per person, industry, and product. It is peculiar that most of the respondents confirmed the human necessity for socialization; this is, however, not always linked to the physical exchange with customers. The global Coronavirus pandemic has impacted the importance of social interaction (UN, 2020); therefore, all of the respondents agreed that the social aspect of their business is essential. Still, this does not directly translate into a preference for physical proximity to businesses located in the same area or to the customers. The dichotomy of the interview responses demonstrates how subjective the vitality of physical proximity for cultural entrepreneurship is. Especially in the times of the Coronavirus crisis, where digital push has been compelled over many people, as physical interaction was not possible for a while. Notably, digitalization has taken a tremendous amount of daily activities, replacing face-to-face conversations with Zoom meetings, shopping through e-commerce, cultural activities with online performances and tours, and many more. Many respondents say it is here to stay. Others claim that people are yearning so much to not being behind the computer screen anymore and finally getting to experience life physically. This might lead to an assumption that the digitalization of entrepreneurship is temporary and still shall go hand in hand with consumer demands - human connection and physical experience.

While most of the entrepreneurs interviewed believe in the combination of both digital and physical worlds in the future, some outliers still claim there is a considerable potential to solely developing the business digitally in the CCIs. This chapter of the current research shall provide a coherent overview of the findings of this dissertation. It starts from the description of the interviewees and their status quo in terms of their digital presence and changes through the COVID-19 pandemic. Secondly, the distinction in findings between respondents' perception of physical offering and digitalization is elaborated on. The entrepreneurial characteristics influencing the subjective value of this research are then put into perspective with the findings

and respondents' judgments on the subject of physical proximity. Lastly, the future predictions generalized from the empirical data are being presented.

4.2. COVID-19

4.2.1. Status QUO of the respondents

Amongst 11 interviewed businesses, 7 of them went through a challenging transition period, where they had to rapidly digitize their services to remain afloat and to be able to offer the same quality online as they do offline. Table 2 demonstrates the actions taken due to COVID-19 in terms of digital changes, physical representation, and the overall impact of such actions on businesses. (+) highlights the positive impacts of COVID-19 and the respondents' actions within the digital and physical realms, while the (-) implies negative impact.

Table 2 – Entrepreneurial changes and impact due to the Coronavirus pandemic

Respondent	Industry	Digital changes	Physical	Impact on	
			changes	business	
Respondent 1	Jewelry	None	Moved to	- Revenue	
	design		home office.	decrease	
				- Fewer new	
				projects	
Respondent 2	Sweaters	Implemented an online	Moved to	- No new	
	design	showroom;	home office.	business	
		Took part in digital fashion		+ Community	
		shows;		growth	
		Implemented an e-commerce		+ Revenue	
		for B2B and B2C.		increase	
Respondent 3	Illustration	None	Moved to	- Revenue	
			home office.	decrease	
Respondent 4	Graphic	None	Moved to	- Revenue	
	design		home office.	decrease	

Respondent 5	Handbag	Worked on the online	Moved to	-	Revenue
	design	community (Instagram,	home office.		decrease
		LinkedIn, podcasts, content,		-	Slower
		activism communities);			expansion in
		Hosted webinars and online			B2B
		talks;		+	Community
		Worked on e-commerce and			growth
		branding.			
Respondent 6	Dress	Took part in digital fashion	No change.	-	Revenue
	design	shows.			decrease
				-	Delay in
					new
					collection
				-	Reduced the
					collection to
					be safe
Respondent 7	Interior	Improved the website.	Moved to	-	Revenue
	design		home office.		decrease
Respondent 8	Interior	Worked on e-design.	Quit co-	+	Revenue
	design		working space		increase
			contract;		
			Moved to		
			home office.		
Respondent 9	Cultural	None	Moved to	+	More free
	agency		home office.		time and
					higher
					efficiency to
					juggle

					different
					projects
Respondent 10	Fashion	Worked on digital	No change.	-	Less side
	designer	representation;			projects
		Started with marketing and		+	More
		PR;			followers on
		Building a community			Instagram
		online.			
Respondent 11	Festival	Shifted to digital events;	Moved to	+	Lowered the
Expert		Developed digital	home office.		costs
		networking tools.			

On the one hand, 4 out of 11 entrepreneurs did not have the time, resources, or willingness to make any changes to their digital presence. All of the entrepreneurs interviewed have had a website and some social media presence. As Susan Zukin predicted in The Innovation Complex webinar (2021), people do not talk about electricity anymore because "everything is electricity, eventually we will stop talking about tech, because everything is tech". Nowadays, people find it suspicious if they cannot find a store or a company they wish to make a purchase from online. Digitalization is not a temporary phenomenon, claims Respondent 2. Even though it might be complemented by physical representation, it is compulsory for modern businesses to be digital to a certain extent. However, digitalization is constantly developing; there might be new technological ideas that businesses may need to adopt if they wish to meet the demands of the market and their consumers. Still, four respondents of this research decided not to make any changes as it was too costly for such small businesses. They did not have the human resources to employ changes or did not see the need to enhance their digital offering. 3 out of 4 respondents that took no digital change throughout COVID-19 pandemic, experienced loss in the revenues. Respondents 2, 5, and 6 already had a basic online store and were satisfied with the lowered income it was bringing. Respondents 3, 4, and 9 do not have a physical product, so they assumed a simple portfolio website would suffice. Respondent 7 has a physical showroom but never assumed their product would fit for online retail.

On the other hand, others took the time of the lockdown as an opportunity to invest in their digital transformation. Respondent 2 believes that this would have happened sooner or later, but COVID-19 has given them an extra push and forced them to improve their online services sooner than they would have thought they would. The digitalization of the complete order management has directly impacted their revenues, too. Respondent 8 has been working on improving her/his digital service as an e-designer, which paid off quite well in terms of new customers. Respondent 5 has been working on online campaigns, digital marketing, branding, and community building which has impacted the overall awareness of the brand. Therefore, most respondents have noticed a positive impact on their businesses after-action upon improving their digital performance. For some cases, it has not directly translated into revenue growth just yet, but such positive effects as community growth and building up their customer base by means of digital communication and other online activities.

It still remains to be seen how some of the digital changes are temporary and only serve as means of sustaining the business while physical options are not available. All of the respondents have moved to work from home for the time of the lockdown, but respondents 6, 8, 9, and 10 discovered, they will discontinue their contract with co-working spaces or offices in general and make the most out of their home office experience also post Coronavirus pandemic. This still leaves the majority of the respondents taking temporary actions in terms of their location and willing to move back to the physical workspaces as soon as possible.

Whether the digital and physical changes taken by the respondents in the time of the pandemic are exceptional or a norm shall be revealed in the next section.

4.2.2. Pandemic related findings

Due to the imposed regulations and long months of lockdown, most of the people were yearning for social interaction. Some respondents confirmed they were craving to get back to the office; others wished they had a normal face-to-face conversation with a colleague or businesses next door, others missed the social interaction with their customers. This enhanced desire to socialize does not necessarily translate into the apparent need for cultural entrepreneurs to be of physical proximity to one another and the spillover effect happening while in the cluster. It is rather seen on a personal, humane level by most of the respondents. Respondent 8 explains: "COVID was like a massive wake-up call for everybody to realize how much we do need the human

connection". The enhanced importance of socialization was provoked by the imposed regulations of social distancing and venue closure. Therefore, the respondents' desire for human connection and real-life conversations may be biased by the pandemic situation forcing such a perspective. It seems that for most of the respondents, COVID has forced the digital transformation of their business. Even those who took no action of improvement in these challenging times agreed there is a need for it, as testified:

I don't like when people try to sell me something. So, I don't want to be the annoying guy. So, I mean, at some point it will be if the (digital) trend continues I will be dead to you, that is not really worth to keep running as a business. So yeah, I might have to do something there and start with online advertising and a webstore or something... (Respondent 1)

Respondent 1 sees digitalization as an enforced medium to increase the demand artificially, as by means of online presence one automatically increases the audience scope. He claims that advertising cultural products is way too aggressive and does not go in line with the value of the product itself. Hence, digitizing would have been a mission drift in this scenario, as the value is brought to consumer through search costs and association with the brand he decides to purchase from. On the other hand, those who failed to digitize before the pandemic took this opportunity as a learning process and a favorable circumstance for improvement. 6 out of 11 respondents explicitly stated that Coronavirus crisis forced them to work on their digital presence. Even the expert claimed that:

It's not like we were completely unaware of this opportunity before the pandemic, but it was more a cultural thing also to, you know, actually do this step and be courageous enough to say we're not doing any physical event anymore. (Expert Respondent)

In order to manage risk sufficiently in the economic crisis the Coronavirus pandemic has brought upon us, digitizing might serve as a solution, especially if meeting new potential customers or business partners is limited and physical offering is extinct. The value that digital transformation brings is certainly the awareness, maintaining at the same level with competition, automation and

branding (IDC, 2020). Whether this solution is temporary still remains to be seen, as there was a dichotomy of opinions the respondents shared on this topic. All of them strongly depend on the industry, product, individual approach and the mission of the entrepreneurs' interviewed. This shall be reviewed in the next section of this chapter.

4.3. Digital vs. physical

4.3.1. Digital realm

The interview data demonstrates that there is neither clear-cut nor shared preference of what is better: digital or physical presence for small cultural and creative entrepreneurs. Due to the importance of the physical aspect being rather dependent on interviewee's particular values, needs, and mission, each respondent had a slightly different take on the advantages and disadvantages of both worlds.

As was highlighted in the theoretical part of this research, digitalization of processes brings efficiency and saves costs for entrepreneurs (Mattaqin, et Al., 2021). This line of thought has been confirmed by all of the interviewed respondents. Running a solely digital business has many opportunities as well, such as a broader audience reach and automated processes. Digitization also allows people to work from anywhere, and buy from anymore. Thanks to globalization and digital technologies, it is nowadays possible to purchase a fashion garment or order a design for your brand without ever meeting the people behind those businesses or seeing the end product physically before purchase. As Friedman stated in his interview, "the world is becoming flat. Several technological and political forces have converged, and that has produced a global, Web-enabled playing field that allows for multiple forms of collaboration without regard to geography or distance - or soon, even language" (Pink, 2005).

For many this strikes to be advantageous, as they believe that their product does not require physical testing (e.g. design object or book) or human interaction (e.g. illustration or interior architecture). Also, working from home saves the travel and commute costs, allows for higher concentration levels and more efficient processes, which might be impactful factors for some entrepreneurs like respondent 2, 5, 6, 9, and 10 as well.

I really like this way of doing things. I think it takes away the logistics part of it! (Respondent 9)

Respondent 1 also claimed their concentration is better when they work from home, not surrounded by the noise of the office or store. Respondent 8 even believes that she provides a much better service online. This, in turn, strongly depends on the type of product/service and the industry, making this judgement somewhat subjective:

I really do love working online, I'm able to really provide to my clients with a really good service. (Respondent 8)

The consumer demands have also evolved throughout the pandemic. Customers expect to be able to order online or get a consultation over Zoom or the like as easy as it would be for them to come by physically. With the growing demand for digital goods, it only remains to be seen how some firms cannot afford to run both an online and an offline business as it becomes challenging to maintain the two. The expert respondent, has developed the technology to enable most efficient events programming online for their organization. This does not only include digital conferences, shows and presentations, but also online networking. According to the expert respondent, digital networking allows for even greater user experiences and making it simple for people from different businesses to connect. As networking has been considered one of the key antecedents of entrepreneurial growth in the CCIs, this argument makes particularly a lot of sense (Potts, 2009). The expert also believes the future will not be dependent on physical contact and face-to-face exchange, so entrepreneurs would benefit more from online experiences like these. An online network is certainly beneficial when it comes to convenience, low cost and deliberate choice of the potential contacts (Bahlmann, 2020). Respondent 9 agreed with the expert, claiming that her professional network is "digitally native", so it makes it more effortless to network online. Especially when physical networking is not possible, this strikes as a temporary solution. However, the networking cannot happen spontaneously anymore, and sometimes appears somewhat forced and opportunistic. Human beings do not necessarily meet people with an end goal of receiving some benefit from them. Online networking seems to create an artificial imposed situation where both participants seek benefit from the connection. This can

be viewed from an advantageous perspective, when both parties are looking for mutual benefit. Still, the disadvantage here is that this can become too intrusive and impersonal.

...on purpose, making contacts with people, you know... I'm Not good in that because I mean, I'm a bad sales person. I also don't like to sell my product. (Respondent 1)

Respondent 1 along with a few more also confirms that purposefully networking is not a pleasant activity and is seen by him and his potential partners or customers as too pushy. Not having to look like a salesman, whether you are pitching your product or yourself, is also a factor steering some of cultural entrepreneurs away from "putting themselves out there". This might be a particularity of cultural and creative industries, especially for small and more artistic businesses. Forced attention and salesman approach indeed can be considered artificial and misleading, as culture shall not be deemed commodity (Abbing, 2019).

4.3.2. Physical realm

Certainty, there will always be businesses that will only sell online, no matter how much of interaction with the product or the service may be required or desired. But for the most of physical products it still is vital to be viewed in real life, especially when the customer is not acquainted with the brand yet. Trying on a shirt to see how it fits, seeing the furniture piece in the light of the day to understand the color and fabrics, or simply appearing in the ambience of the store, - are the inevitable parts of cultural and creative products and services for consumers. Respondent 5 argues, that it is "valuable for the consumer to see the product first", as they design and produce handbags. For most of the interviewees with physical products it is also the case.

Most of our buyers got to see the actual collection, it makes it a lot easier. And trade shows are for meeting new business. (Respondent 2)

Respondent 2 is convinced that physical contact to potential new partners or clients is vital. The company gets to represent their brand at an event or a tradeshow, meet new people and establish new collaborations. Respondent 2 also confirmed that the most deals with retailer and the most sales normally happen after such events. Respondents 5, 6 and 10 also confirm this claim.

Especially for those who are not only running their business for commercial purposes, but rather for intrinsic motivation and satisfaction in the process and end product, physical aspect is vital. Entrepreneurs running cultural and creative businesses are believed to be driven by more than economic goals (Chang, et Al., 2015). Presumably, this idea shall steer the entrepreneurs of this research away from solely digital business and make them more social and driven by the value they bring to their customers through their product.

I think the human factor definitely in our industry is very important. And that will probably never change, but the actual relative importance has probably shifted. (Expert Respondent)

7 respondents including the expert have agreed that human connection and social aspect of the business are crucial for cultural organizations. Respondent 5 added that both consumers and partners value the face to face connection, especially the small firms. It seems, that the choice on whether the business shall be run physically or digitally is layered with another variable, which is the firm size and how established it is.

Running a cultural or creative business for the market you are located in, adds up another layer to the decision on whether to run a physical or a digital business. The city and the atmosphere of the area the business is located in, may it be a co-working space, a store in the city center or a showroom located in an old factory together with hundred others; impact the artistic creation of the entrepreneur. This is even more accurate for artists than businessmen. Respondent 6 confirmed that the atmosphere of the city and the space she is working for is crucial for her/his creativity. "Berlin is actually known for how have creative it is" says Respondent 8. 7 out of 11 respondents agreed that being surrounded by other businesses from all sorts of industries is motivation and influential for their flow. As creativity is in the core of related cultural and creative industries, it becomes apparent that the setting and surrounding the entrepreneurs operate in are vital for their success. Some make use of the place to be inspired by other creators (Respondent 1, 4, 8) to allow and stimulate collaboration (Respondents 1, 2, 3, 4, 5, 7, 8, 10), and/or to increase the client base (Respondents 3, 7, 8). The notion of place has been established by both philosophers and geographers in the last century, claiming that a place differs from a space by what people attribute to the space, by senses, symbols and other attributes (Tuan, 1977).

The place people work and live, the surroundings in which the creative work happens, stimulates their artistic activities. "Culture is important for creativity", says Respondent 3. Being inspired by other enthusiasts located in the same place may stimulate the willingness to create, the knowledge transfer with them may bring to novel ideas and innovation, as well as collaboration, which therefore leads to growth.

Many respondents have also benefited from side projects through collaboration with other firms located next to each other. This primarily happened through a personal connection or lending a hand, and not particularly because one party was only interested in collaboration. Some of the respondents claimed that "synergies" are vital for the prosperity and growth of their business. This contradicts the notion of digital networking and how this is beneficial, as online networking does not allow for spontaneous connections to people in an informal setting.

I love also doing different things like also side projects as well. And something that really inspires me is being in a Factory (co-working space) and being around that kind of buzz and vibe of people that are actually really doing stuff and not just like come to Berlin to party. (Respondent 8)

It's great for me to be around people that inspire me, and I definitely got loads of clients also from the Factory (co-working space) as well. (Respondent 8)

Both client base enrichment and enthusiasm about the surrounding creative work is being experienced by Respondent 8, along with some others. Most of the respondents also had to benefit from their client base and rely on word-of-mouth (WOM), which was partially deactivated during the times of COVID-19. According to the Caves' principle "Nobody knows", cultural products are partially characterized by demand uncertainty, especially for cultural services, therefore ensuring the spread of WOM shall enrich the audience scope and hopefully enlarge the client base in the future (Caves, 2003).

Even though working fully isolated, operating a solely digital business has its advantages, but Respondent 7, amongst others, claimed that digitalization requires resources, such as manpower and financial investment, which they, as microbusinesses did not have at a time. In addition, people are social human beings who need to interact from time to time, and the

pandemic has reminded us of that more than anything. Respondent 6 believes that in the "pandemic time, we realized how important people are". It has been established, after more than a year of Coronavirus crisis, people want to socialize more (UN, 2020). This has been noticed on social media, on the news, as well as supported by all of the respondents of this research. But which particular elements of social realm were missing during the COVID-19 pandemic and how their absence influenced the businesses of these small cultural and creative entrepreneurs?

It has been already established by the literature and the empirical data, that social aspect is important for CCIs (Chang, et Al., 2015; Pratt, 2010; Potts, 2009). Therefore, the meaning of networking is vital when it comes to growth of cultural businesses. In the past, when digital technology was still limited, people could only network by actually introducing themselves to each other in real life, be it at the office, at the event or elsewhere. Today, in the light of recent Coronavirus crisis, the networking has moved to the digital world, which arguably has both advantages and weak spots. Nevertheless, all of the respondents agreed, that human connection and network is "one of the driving factors" (Respondent 8), and is essential for their business growth. As the notion has a subjective characteristic, each entrepreneur is in the right to choose their own medium of networking, be it online or offline, it is hard to say per se which one is more efficient, rather than wise application suiting to the individual shall work best, therefore there is a subjective value to the judgements collected thought the interviews, which will be revealed in the next section.

4.3.3. Entrepreneurial characteristics

Qualitative methods imply a high degree of subjective judgements, and this research is not an exception. The methodology chosen for this thesis allows for deeper understanding of motives, experiences and opinions, which, on the other hand, limits the objectivity of the current study (Babbie, 2016). Therefore, there is a need to elaborate on the correlations and dependencies of the empirical data.

4.3.3.1. Industry components

First of all, all the respondents come from the related cultural and creative industries, located in Berlin, in particular: garments design, fashion design, illustration, graphic design, interior design, events and creative agency. The businesses can be divided by physical products (garments design, fashion design), and service (e-design, events, illustration, graphic design, creative agency). From the customer point of view, these two types of businesses are very different as one requires a store or an e-commerce platform and acquaintance with the physical product, while the latter requires no physical human interaction whatsoever, as everything can and is done online. While this research does not tackle the customer satisfaction per se, it does concentrate on the business side of the entrepreneurship. Here, the opinions could be generalized for all the interviewed firms. Nevertheless, having a physical product as a business whilst having a service demonstrated a dichotomy of opinions. Table 3 demonstrates the distinction of types of products amongst entrepreneurs per respondent.

Table 3 – Physical vs. digital products

Respondent	Industry	Product
Respondent 1	Jewelry design	Physical
Respondent 2	Sweaters design	Physical
Respondent 3	Illustration	Digital
Respondent 4	Graphic design	Digital
Respondent 5	Handbag design	Physical
Respondent 6	Dress design	Physical
Respondent 7	Interior design	Digital and physical
Respondent 8	Interior design	Digital
Respondent 9	Cultural agency	Digital
Respondent 10	Fashion designer	Physical
Respondent 11	Festival	Digital and physical
Expert		

Respondents with product businesses claimed, that such things as the touch and feel are important, along with human labor, production and distribution. "It's nice for the people, to be able to touch and see the bags", says Respondent 5. Generally, physical cultural products are unique and sometimes higher in value, so it only makes sense for the consumer to be willing to see them in real live before purchase. This is strongly dependent on the type and uniqueness of

the product, as the willingness to "touch and feel" the mass-produced creative product from a known brand is lower, that for a niche small cultural producer product. Respondent 6 also believes, that trust is a big issue, with young not well-established brands:

So, this is why I'm doing the fashion shows. to show them that there is somebody behind this brand... Just not because of the sales, but more about the trust. (Respondent 6)

On the other hand, for digital services, the physical representation is less important, as their offering is already digitized. Still, service-related entrepreneurs claimed that they lacked the human contact, networking, attending tradeshows and the like. Even though these businesses have a digital offering, a big part of their day-to-day consists of human interaction, physical labor or offline networking.

4.3.3.2. Mission

Secondly, there is a different value that cultural entrepreneurs put into their businesses. As related cultural and creative industries are known for being more commercially oriented, this shows on practice too (Throsby, 2008). Many of the respondents saw the mission of their businesses much more economically driven than creative, they did not see the need to connect with the customer or to grow and achieve higher success as an artistic business, but rather simply remain afloat. Various missions are also something that can be taken into consideration when analyzing the responses on physical presence, as more commercially oriented respondents with fewer ambition did not recognize the value of physical networking, community building, atmosphere of the space and the like. Respondent 10 also confirmed, that there is a big difference between a functional and creative product, she believes that "it's a personal association with your brand and rather than a functional". Cultural products have a subjective value characteristic, and shall be evaluated by more than market prices or explicit function they provide (Dekker, 2014). This implies, that cultural products and the process of their creation is not functional per se, and therefore are unique and not aimed for everyone. Respondent 8 even claims, that she has the possibility to choose her clients the way she sees fit.

In theory, the focus of creative goods lays on the creative process and extraction of artistic satisfaction from it (Abbing, 2019). On practice, however, the value of artistic production differs per respondent. The research has demonstrated, that even in the related cultural industries, which are already deemed to be more commercial, there is a further distinction between more profit-oriented and more artistic businesses. Depending on the mission of the entrepreneurs, the judgement on the importance of physical proximity was skewed. More commerce-oriented respondents (1, 2, 4, 6, and 7) were befogged by the revenue targets, and could not value the social interaction and physical representation above numbers; while more artistic organizations (Respondents 3, 5, 8, 9, 10, and 11) could see the potential benefits of physicality much clearer. This is comparable to the two fields of production of Bourdieu (1984): restricted production and large-scale production. While restricted production is aimed at literary society, niche target group who is not only able to pay higher amounts, but also recognize the artistic value of the product; the large-scale production is aimed at non-cultural producers, or those who are not as culturally educated and more mass-production oriented (Bourdieu, 1984). Applicable to the current case, depending on the mission, the entrepreneurs of this study acted according to either of their purposes.

Another layer of subjectivity in this regard can be established in the dichotomy of young and established firms. The difference here is that smaller or less established cultural entrepreneurs do not have the scope and the scale like bigger firms do. First and foremost, smaller institutions value human connection. Respondent 5 claims that "they're also like one-man, two-man till five-men companies or teams and they definitely prefer a personal relationship". Secondly, the less established firms are fresh with ideas and still ambitions to follow their original mission rather than action on demand or follow the most efficient strategy, like more established firms. Respondent 5 also confirmed that, as a young brand, personal connection and following their mission are of key importance. Notably, this finding is limited to one respondent only, which might not affect the generalizability of the findings of the current research. Moreover, the extent to which the artistic values prevail over the economic ones does not only depend on the size and age of the company, but also on the industry, type of product and also personality factory, which will be reviewed in the next section of this chapter.

4.3.3.3. Personality factors

Thirdly, as the current research tackles the subjective insights of each individual respondent, it is important to note, that personality characteristics could play a role in their opinions. Respondent 6 found working online more comforting as she dislikes being surrounded by people or networking. She also claimed that digital networking would be ideal for her, as she is "very shy":

... this is my biggest problem, as you said "people buy from people" and I have to change this attitude I have, you know, I just don't want to be in the middle of this thing. I'm very shy in this thing. And this is why everybody tells me you have to be more present, you have to put yourself out there. (Respondent 6)

Respondent 8, however would have wished not to automate some of her services, as these are the vital ones of her business, bringing her joy and artistic satisfaction:

There's obviously the personal sides that we just can't automate, which is the part that I love like, I love getting consultation calls with the client, I love looking at their photos of their spaces and like getting to know them. (Respondent 8)

To sum up, the subjectivity of the current research has revealed a few interdependencies influencing the potential response to the research question. While it is impossible to give a universal answer to the question, the variables influencing this entrepreneurial choice have been established. These include and are not limited to artistic vs. business logic, product vs. service, and young vs. established firm. These dimensions shall be summarized in a coherent analysis and interpretation in the discussion section after the future prospects review.

4.4. Future prospects

Notably, neither the respondents nor is the author of the current research a future teller. Nevertheless, the experience and agency of the interviewed participants of this research provides solid ground for a speculation and predictions of future dynamics of cultural and creative industries in regards to physical proximity externalities.

4.4.1. Hybrid business model

First of all, all of the participants envision a hybrid model. This implies, that cultural and creative businesses will not solely be digital or solely physical, it would be a mix of both worlds. As the digital transformation already happened, there is no way to rewind this. The generation Z does not even know life without smartphones and computer screens. The world as evolved, and so did the economy. In order to keep meeting the consumer demands, entrepreneurs have to play by their rules, and if most of the target audience is online, so shall the business model be. This still does not deny the value of physical presence, which is important for further value added in terms of community building, physical networking, belonging to a place, artistic inspiration and other positive externalities. Therefore, a combination of physical representation where needed with a smart tech is believed to be the future 7 out of 11 respondents. Respondent 2 claims that the future will not include so much high-tech solutions such as VR and AR for creative industries:

It's going to look a lot more a lot less futuristic than we thought a lot more hands on. (Respondent 2)

Technology will complement business. (Respondent 2)

Without a doubt, there will be companies adopting virtual dressing rooms and creating digital "try-on" items for sale. This is already happening. However, this is believed to be extra, costly and not particularly what the end users want. Hands-on digitization would imply a certain type of incremental innovation, utilizing the existing technology (Henderson, & Clark, 1990). An example provided in one of the interviews was simply utilizing Instagram as an online store, or efficient e-commerce platform with a smooth automated order management system.

It seems, that especially for small cultural entrepreneurs, incremental innovation might be the optimal solution. Many of the respondents claimed, they experienced lack of resources of digitize their businesses, others did the minimal improvement effort, but none of the respondents has actually radically changed their business model towards high-tech digital solutions.

Respondent 4 also states, that "nothing is too good if it's too much of one thing", implying that both consumers and partners get tired of everything work aspect happening in the digital realm.

Still, the world without digital is unimaginable, which sets a solid ground for the argument, that digitalization is slowly crowding out physical proximity.

4.4.2. Globalization

Secondly, due to globalization and the imposed lockdown both clients, firms and intermediaries realized that some of the work can be done remotely. Respondent 4 claims that digital world shall assist us in accomplishing the work life the most efficient way, so that we have more time for the private life offline that we started to appreciate after COVID-19 even more. Other respondents confirmed the prefer the division of their spaces too. Therefore, even freelancers or solo entrepreneurs prefer renting a co-working space. This is not only done for networking and ambience of creative class around, but also to separate the work day from private life and achieve the work-life balance.

With people moving more to rural areas after the pandemic (Florida, 2020), it seems that there is a distinction to the phenomenon of digital vs. physical business and its value dependent on the place. Globalization is making people believe that they can reach anything and anyone from any part of the world. This, in turn, supports the idea of efficient online remote work experience complemented by offline private life in the rural area.

So, people are moving more away from, from big cities, but still need that physical, like connection with people. (Respondent 8)

However, the value of small communities is still there. Running a small business in a small town where everybody knows the business owner differs tremendously from having the same size business in a bigger city or online. The reason behind this could be either the actual value of the place that stimulates the growth of the business, or the lower economical and technological opportunities of this place that make the business stay physical. When thinking of Berlin, as a big city, it becomes clear that people move away as rents become too high and work can be done online. Consequently, the vibe, the atmosphere and the possible positive spillovers of co-location disappear too, 3 out of 11 respondents confirmed.

And as everything is changing, rent is becoming more expensive, which means that creative hubs in the city are changing as well, because the artists and the musicians and other workers actually cannot afford to live in the cities and are moving out of the city. (Respondent 8)

The city is changing, this does not directly imply that all the businesses will move out, too. With a strong sense of community and attraction, people will still be visiting Berlin, if not for creative clusters anymore, then probably for the growing tech hubs, which could technically be considered a part of related cultural industries as well. Still, for small cultural entrepreneurs it is a strategic choice whether to either move to digital entrepreneurship or remain in a physical space. The interdependencies of this choice will be reviewed in the discussion chapter of this research.

Chapter 5: Discussion

Digitalization is undoubtedly becoming more prominent for businesses while crowding out physical representation at times, as it is deemed to be more efficient. More and more cultural entrepreneurs opt for solely digital ecosystems due to their positive efficiency externalities, and broader audience reach (Mattaqin, et al., 2021). It is hard to fathom a contemporary business without a website today, as a tremendous part of everyday life is on screen. Digitalization is made to automate complex processes and reduce costs, which is deemed beneficial on both individual and institutional levels. However, there will still and always be space for physical representation.

So, does proximity still matter? A simple answer would be - YES, it does. Nevertheless, to allow for the depth of the response to the research question, a thorough elaboration is imperative. Physical proximity externalities still remain valid for many cultural and creative entrepreneurs in the creative clusters of Berlin. Beginning with the fact that people are by nature social human beings, Aristotle claimed (Dooremalen, et Al., 2007), this research also demonstrated that before and after the pandemic, everyone had a desire to socialize to a certain extent. People started yearning for social interaction outside their homes, having had the Coronavirus regulations imposed on them for too long. It is only natural that all of the respondents had an enhanced desire to be of physical proximity to one another. In terms of the social aspect for entrepreneurship, it has been established that networking is a significant part of growing a business. Depending on the individual, this might come in both online and offline forms, as both options are agreed to be effective by the respondents. People need knowledge exchange, collaboration, and inspiration, which rarely happens in the digital setting. Due to the subjective value of the current research findings, it is fair to leave the choice of the mode of networking to each entrepreneur, as it depends on many factors.

So does the choice of the physical presence against digitalization or vice versa. While physical representation has many positive externalities for cultural entrepreneurs in Berlin, such as networking possibilities, spontaneous collaborations, recognizability, ability to showcase a physical product, atmosphere, artistic inspiration, etc., digital entrepreneurship is supposed to carry other advantages such as cost reduction, efficiency, broader audience reach, and meeting the demands of today's generation. In order to illustrate the dichotomy of interdependencies on

the choice of the business environment, Figure 4 is being presented.

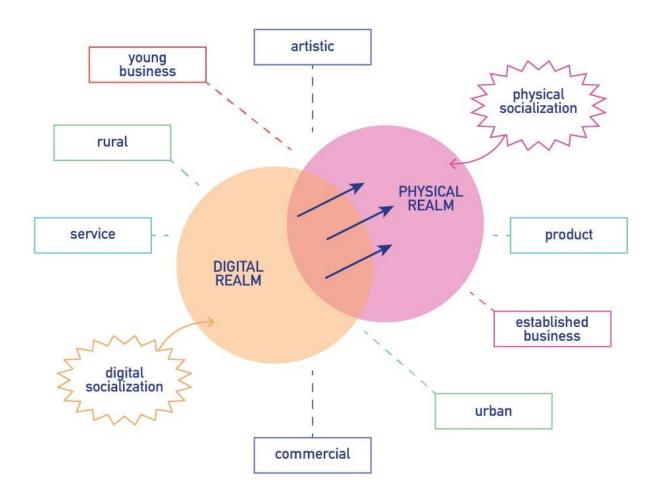


Figure 4 – Interdependencies of digital vs. physical representation (Moy, K., 2021)

Figure 4 illustrates how digitalization is crowing out the physical realm, while allowing for a hybrid model situation in between. Digital and physical types of socialization are then implying that both formats are acceptable, equally efficient and strongly dependent on individual preference and capacities. There are four interdependent factors that can be considered as "layers" influencing the entrepreneurial choice of digital ecosystem over physical representation or vice versa.

5.1. Artistic vs. commercial

The first interdependency has to do with how artistic or business-oriented the entrepreneur is. The current research has demonstrated that the more commercial values business has, the more it tends to shift towards a more efficient digital strategy. The more artistic entrepreneurs could see more value in the personal connection to customers and partners, experience and symbolic values of their product or service, treat artistic mission over financial goals, and, therefore, value the importance of the physical space much more. Cultural and creative entrepreneurship differs from regular entrepreneurship in the definition, as the former implies a higher degree of intrinsic motivation and aims at self-fulfillment within a cultural organization (Preece, 2011). While profits are deemed to be the highest priority of other commercial organizations, cultural entrepreneurs are believed to realize their cultural values through economics as a tool only (Klamer, 2011). Other values such as symbolic value, social value, and cultural value are inherent to cultural and creative industries much more than the commerce sector (Abbing, 2019). Therefore, more artistically-driven entrepreneurs tend to follow their intrinsic values over efficiency and choose physical proximity if they deem it essential for their business and their consumers.

5.2. Product vs. service

The second interdependency is based on product or service kind of entrepreneurs. Product-driven businesses tend to value physical representation much more due to the physical product attributes. Their customers and potential partners have the apparent need to see, touch, and feel the product, making the physical representation crucial for such businesses. When speaking to entrepreneurs offering a service, their business appeared to be much easier to digitize. Due to the demands on their customers, there was no evident necessity for a physical store, office, or showroom. Physical products also require a logistics chain, which implies direct physical contact with manufacturers, delivery men, or the like, making it easier to have a physical location for this purpose (Roy, 2021). Also, it has been established that consumers value digital goods less due to the psychological ownership of such products (Atasoy, & Morewedge, 2017). Consumers associate physical representation with more value for the product and higher trust. Needless to say, is that physical products are more convenient to demonstrate due to their physical nature;

therefore, a physical representation is more valuable. A service offered in the cultural and creative field, such as graphic design, implies a high level of digitalization, making the physical aspect of such a business less crucial.

Nevertheless, when the product vs. service interdependency is layered over the artistic vs. commercial, the preference may still be stronger for either the digital or physical realm, as these factors shall be viewed as all possible components determining the entrepreneurial choice.

5.3. Young business vs. established business

The third interdependency is based on the difference in perception of new young small businesses compared to well-established small businesses. The research has proven, that young small businesses cherish the personal connection and physicality much more than bigger or established ones. This does not deny the fact that bigger businesses can have a more robust artistic vision and a physical product; they simply have more liberty not to treat every connection too personally. The social contacts that happen within smaller and younger organizations are seen as a part of entrepreneurial growth and success much more than they do for established businesses. Therefore, younger entrepreneurs rarely drift off their mission and still believe in their core artistic values, making them realize the importance of physical proximity much more. The more established the business becomes, the more the tendency of routine work and rational decisions develops, "as a business matures, it is hard to keep its original spirit alive", Harvard Business Review reports (2019). They claim that start-ups have a probability of losing the entrepreneurial drive after a while, which may be drifting them off the original mission a bit and steer towards more pragmatic decisions. As cultural and creative entrepreneurship is known for its significant creative value aspect, one can draw a conclusion that younger firms with higher entrepreneurial force will not go astray and still consider physical representation of crucial importance, may it be beneficial for their overall business mission.

5.4. Rural vs. urban

The last but not the least dependency of the model is whether the businesses are based in rural or urban environments. The findings of the current research confirmed, that people are moving away from cities (Florida, 2020), making cluster externalities extinct. Therefore, businesses

located in the rural areas tend to work more remotely, and invest more offline time in their families and friends, and work on their work-life balance. While those located in the city benefit more from localization economies and it makes more sense for them to remain physical (Gong, et Al., 2017). In this interdependency, the scenario could also be reversed when rural businesses are embracing physical representation, which brings much more value for the place and the entrepreneur, as they benefit more from economies of scale.

The findings of this research have demonstrated a dichotomy of opinions on the importance of physical proximity for small cultural and creative businesses in Berlin. What seems to be evident is that the future holds a type of hybrid model between digital representation and physical presence for small entrepreneurship in CCIs. Digitalization does not decelerate; businesses have to go hand in hand with it if they wish to meet consumer demands. To what extent it shall replace the physical proximity and its spillovers is subject to each business in particular, which can be estimated with the interdependencies model above. Needless to say, that the subjectivism and individual characteristics of each entrepreneur are also intertwined in the decision for one or the other business model.

Chapter 6: Conclusion

COVID-19 pandemic has divided the human perception of the world into before and after the virus. The health crisis has impacted not only the well-being of the world population but also the global economy. Many industries have suffered severe losses due to venue closure and uncertainty, not allowing businesses to plan long-term. The cultural and creative sector, along with the air transport and tourism industries, has been affected the most by this crisis. Especially small and medium-sized businesses in CCIs have experienced many challenges when trying to sustain their organizations. Those who did not benefit from economies of scale were dependent on governmental grants, which were limited due to the crisis and deprioritized industry, and had limited resources to exploit alternative strategies (EY, 2021). Many cultural and creative entrepreneurs decided to digitize their businesses as one of the few available mediums to preserve their practice (IDC, 2020). With digital technology gaining momentum and accelerating its development, it is noticeable throughout the Coronavirus pandemic to present day that digitalization is steering many businesses away from physical representation. Digitalization is now a key fixture for reasons both strategic and out of necessity (Muttaquin, et Al., 2021). Based on the theoretical background of the current research, built on clustering theory and entrepreneurial ecosystems, the expectation of the study was that cluster spillovers would become inferior in the context of digital entrepreneurial ecosystems, as digitalization seems to replace co-location benefits.

The main objective of the current research has been to understand to what extent digital transformation crowds out the physical proximity externalities in small businesses in CCIs in Berlin during and post Coronavirus crisis. By means of empirical data collection through 11 semi-structured interviews with small cultural and creative entrepreneurs of Berlin creative clusters, this research concludes that there is more than an unambiguous answer to the research question posed. The findings of this study conclude, that the extent to which physical proximity is adopted over digitalization is strongly dependent on the entrepreneurial attributes.

Overall, the fundamental discoveries include the importance of physical proximity for small cultural and creative businesses. It is inevitable that social aspect, physical networking, belonging to the community, the atmosphere of the city, and events positively affect the artistic inspiration and growth of creative entrepreneurship in Berlin. People are social human beings;

being co-located with other firms in the same area stimulates creative input and allows for a wider perspective and spontaneous collaboration. However, the speed of digitalization is undeniable. In order to keep up with the demands of the customers, entrepreneurs have to innovate. Digitalization certainly has its advantages, which physical representation may be lacking. These include and are not limited to efficiency, broader audience reach, and innovative approach. One of the key conclusions of this research is that it is not a competition when it comes to the choice of digital entrepreneurship or physical representation. The future envisions a hybrid model combining the best of both worlds the way each individual entrepreneur sees fit.

The research question has been proven to be more complex than initially thought; therefore, four key interdependent characteristics influencing entrepreneurial choice have been established. Suffice it to say, that the decision to opt for a digital marketplace instead of a physical one or vice versa is strongly subject to the personal attributes of cultural and creative entrepreneurs. When analyzing the respondents' opinions on the question, the correlation between their attitudes towards physicality of their businesses and the extent to which the organizations were more commercially or artistically oriented was observed. This interdependency allows this research to conclude that more artistically driven businesses see more value in physical representation and social contact. Three more interdependencies have been established to be able to foretell the entrepreneurial decisions: product vs. service, young business vs. established business, and rural vs. urban. It is crucial to note that these factors shall be considered in combination with each other making the prediction of the entrepreneurial opinion layered with these four interdependencies. The findings of this research allow for the claim that the more artistic oriented, product-based, young, and urban the entrepreneur in the cultural and creative industry is, the higher is the chance that they would value physical representation over the digital entrepreneurial ecosystem. Although physical embodiment shall be complemented by digital presence, solely digital businesses do not need to embody physicality to function and grow with the same efficiency.

The conclusion of this exploration is that physical proximity still matters but shall be supported by a digital image. Digitalization is not temporary and it is a subjective and conscious choice of each individual cultural entrepreneur to either embrace digital transformation, or run a physical business, or find their own golden middle combining the two. The model of interdependencies of this entrepreneurial choice shall serve as a contribution to academic

research. There is an apparent gap in the literature in connection to the Coronavirus pandemic crisis, creative cluster theory, and digitalization. Therefore, the current study shall be a valuable addition to scientific and academic research. Scholars shall take advantage of the conclusions for their own implication in the field. Moreover, entrepreneurs shall benefit from the findings of the current study applying them to their entrepreneurial practice, better predicting the tendencies of the future entrepreneurial trends in cities, and making a conscious choice for their own practice based on the interdependencies model and overall findings of this research.

The choice of the time, place, and method of this study was not at random. After a year of the global Coronavirus pandemic, it was evident that the economy is changing. With people moving more to the rural areas, it became apparent that cities were changing too (Florida, et Al., 2021). As a city with a high density of cultural and creative businesses, as well as many innovative entrepreneurs, Berlin served as a perfect example for this case. It has demonstrated a fitting instance of a big creative city, with entrepreneurs contributing relevant observations that have resulted into theory-making. Using qualitative methods and thematic analysis have allowed for valuable insights into the dependencies of entrepreneurial choice, the future of cultural and creative industries in cities, and dynamics of entrepreneurial practice both online and offline. Due to the nature of the interpretivist approach, it was possible to deeply understand each participant and draw generalizable conclusion of the current research.

Nonetheless, neither of the research methods is unblemished. The first limitation of this research is that the sample consisted of both entrepreneurs selling a physical product (e.g., fashion, apparel, interior) and offering an online service (e.g., illustration, design). It was certainly advantageous to see the difference in perception on the physical proximity of the two, which allowed for the emergence of one of the interdependencies. Still, having the mixture of products and services in different cultural and creative industries has impacted the scope of the findings, making them harder to generalize. Therefore, Throsby's related cultural and creative industries might be too broad of a target group for this research. Secondly, qualitative methods imply a strong level of subjectivism. The responses were strongly influenced by entrepreneurs' past experiences, industry, and type of activity. Thus, the results may not be generalized to all cultural entrepreneurs in Berlin's creative clusters.

Last but not least, the suggestions for future research might include and are not limited to replication of the current study in a year to see how the tendencies of rural migration and digital

entrepreneurship develop post Coronavirus crisis and whether the predictions of the current research are realized. For more complex and precise analysis, a quantitative study could be recommended to operationalize the interdependencies and be able to anticipate the entrepreneurial choice more precisely. Lastly, in order to acquire a more detailed and profound judgment on the tendencies in one specific industry, it is suggested to reproduce the current research focusing on one specific segment of related cultural and creative industries.

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Appendices

Appendix A – Consent From

INFORMED CONSENT FORM

Project Title and version	Does proximity still matter? How has the Coronavirus pandemic shaped the digital presence of MSMEs in the CCIs of Berlin.
Name of Principal Investigator	Kseniia Komarova
Name of Organisation	Erasmus University Rotterdam
Purpose of the Study	This research is being conducted for the purpose of a master thesis in Cultural Economics and Entrepreneurship. I am inviting you to participate in this research project about digital marketplaces vs. physical proximity in CCIs in Berlin. The purpose of this research project is to study to what extent do digital marketplaces replace physical proximity externalities for small and medium-sized enterprises (MSMEs) in the cultural and creative industries (CCIs) of Berlin post Corona crisis.
Procedures	You will participate in an interview lasting approximately 30-45 minutes. You will be asked questions about the impact of the Coronavirus pandemic on your business and its digitalization. Sample questions include: "[COMPLETION BY PRINCIPAL INVESTIGATOR]". You must be at least 18 years old to be able to participate in this study.
Potential and anti- cipated Risks and Discomforts	There are no obvious physical, legal or economic risks associated with participating in this study. You do not have to answer any questions you do not wish to answer. Your participation is voluntary and you are free to discontinue your participation at any time.
Potential Benefits	Participation in this study does not guarantee any beneficial results to you. As a result of participating you may better understand what the future holds for cultural and creative industries in relation to digital marketplaces and physicality. The broader goal of this research is to comprehend the extent to which physical

	proximity externalities play secondary role after digitalization advantaged for cultural and creative industries in Berlin.
Sharing the results	Your plan for sharing the findings with the participants should be provided. If you have a plan and a timeline for the sharing of information, include the details. You may also inform the participant that the research findings will be shared more broadly, for example, through publications and conferences.
Confidentiality	Your privacy will be protected to the maximum extent allowable by law. No personally identifiable information will be reported in any research product. Moreover, only trained research staff will have access to your responses. Within these restrictions, results of this study will be made available to you upon request.
	As indicated above, this research project involves making audio recordings of interviews with you. Transcribed segments from the audio recordings may be used in published forms (e.g., journal articles and book chapters). In the case of publication, pseudonyms will be used. The audio recordings, forms, and other documents created or collected as part of this study will be stored in a secure location in the researchers' offices or on the researcher's password-protected computers and will be destroyed within ten years of the initiation of the study.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify.
	If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the primary investigator:
	Kseniia Komarova – 476363kk@eur.nl
Statement of Consent	Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree that you will participate in this research study. You will receive a copy of this signed consent form.
	For research problems or any other question regarding the re-search project, the Data Protection Officer of Erasmus University, Marlon Domingus, MA (fg@eur.nl)

	If you agree to participate, please sign your name below.		
Audio recording	I consent to have my	nterview audio recorded	
(if applicable)	□ yes		
		□ no	
Secondary use	I consent to have the	e anonymised data be used for secondary analysis	
(if applicable)	□ yes		
	□ no		
Signature and Date	NAME PARTICIPANT		
Signature and Date	SIGNATURE		
Signature and Date	DATE	NAME PRINCIPAL INVESTIGATOR	
		SIGNATURE	

Appendix B – Interview Guide

Erasmus University Rotterdam, The Netherlands
Cultural Economics and Entrepreneurship Master Program

Master Thesis Topic: Can digital marketplaces replace physical proximity externalities in the cultural and creative industries of Berlin post Corona crisis?

It is believed by many academics, that co-location positively influences the growth of cultural entrepreneurship. During the times of the Coronavirus pandemic, we have noticed, that many companies could not benefit from working from their offices or selling their products/services in physical stores. Many businesses had to opt for an alternative digital strategy, work from home and/or even shift their business strategy completely away from physical face-to-face offering. My research tries to tackle to what extent can digitalization replace the social aspect and the physicality of cultural and creative businesses? How vital is it still to network, to offer face-to-face customer service and to be available at the location? Berlin as a culturally rich city is an especially peculiar example, as physical proximity served for entrepreneurial eco-systems and creative clusters to emerge in the first place. How has your company experienced this shift? And will this change the way cultural and creative businesses operate and are being perceived in the future? I would be very happy to hear your opinion on similar questions which would be a valuable contribution to my research.

Interview Questions:

- 1. Could you please start with telling me about your company/business and your role in it?
 - Size
 - Industry
 - Office/studio space
 - Digitalization
- 2. What has changed for you in terms of the working environment and client/partner relationship during the Coronavirus crisis? (Crisis management)

- 3. How did it affect your business being located in the city center next to other similar companies? (Cluster)
 - Did you experience positive influence of being physically present for your clients and customers? How? (Physicality)
- 4. What kind of changes have you noticed with your business moving online? (Digitalization)
- 5. What would you prefer digital or physical presence of your brand?
- 6. How is Berlin as such a rich artistic scene influencing your business? (Berlin)
- 7. How do you make sure your customers are satisfied? During and before crisis. (Social)
- 8. Would you say that Coronavirus crisis constraints made you opt for digital marketplace?
 - Would you say it is temporary?
 - Is it a strategic move of more of a mission drift that you wish you did not have to undertake?
- 9. Do you think it is possible to run this completely online, or proximity and human contact matters more than efficiency? (Cluster)
- 10. How do you think creative businesses like yours will envision the market dynamics in the future? (Future)
 - Is digitalization a must?
 - Is social interaction still vital?
- 11. Do you have any more comments on the story you just told?
- 12. Would you know of any similar businesses in your area that could help me finalize my research?

Appendix C – Operationalization Table

Question	Code
What has changed for you in terms of the	Crisis management
working environment and client/partner	
relationship during the Coronavirus crisis?	
How did it affect your business being located	Cluster
in the city center next to other similar	
companies?	
Did you experience positive influence of	Physicality
being physically present for your clients and	
customers? How?	
What kind of changes have you noticed with	Digitalization
your business moving online?	
What would you prefer digital or physical	Subjective
presence of your brand?	
How is Berlin as such a rich artistic scene	Berlin
influencing your business?	
How do you make sure your customers are	Social
satisfied? During and before crisis.	
Would you say that Coronavirus crisis	Crisis management
constraints made you opt for digital	Digitalization
marketplace?	
Would you say it is temporary?	Subjective
	Future
Is it a strategic move of more of a mission	Crisis management
drift that you wish you did not have to	
undertake?	
Do you think it is possible to run this	Cluster
completely online, or proximity and human	
contact matters more than efficiency?	

How do you think creative businesses like	Future
yours will envision the market dynamics in	
the future?	

List of figures

Figure 1 – Areas of concentrated creative industries 2013 (Senate Department for Economics, Technology and Research, 2014).

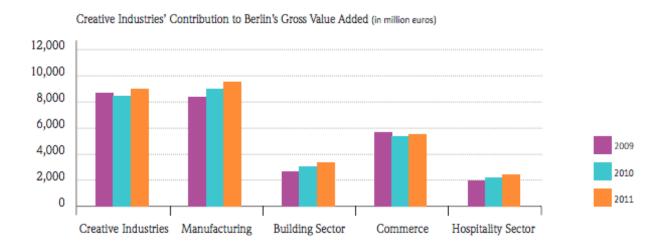


Figure 2 – Areas of concentrated creative industries 2013 (Senate Department for Economics, Technology and Research, 2014).

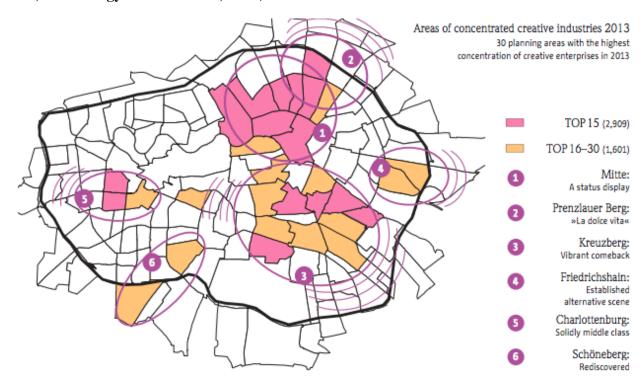


Figure 3 – Code Forest

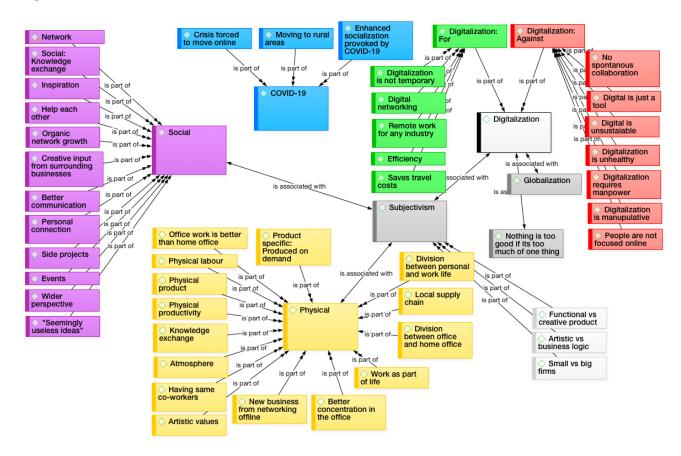
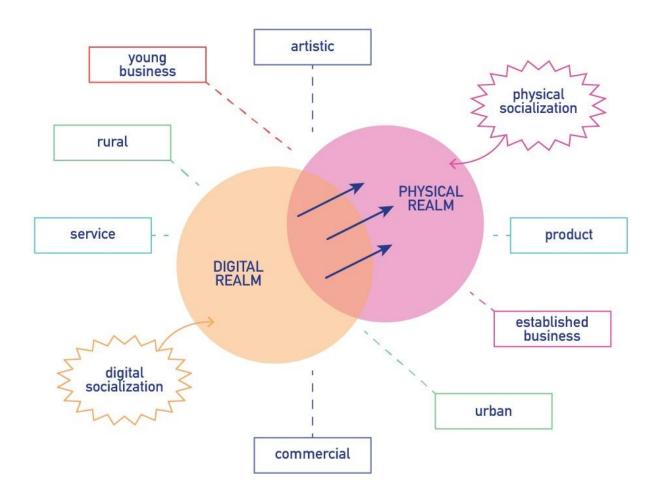


Figure 4 – Interdependencies of digital vs. physical representation



List of Tables

 $Table\ 1-Interview\ Participants\ (an onymized)$

Respondent 1 Jewelry design Berg Space Respondent 2 Sweaters design Berg Space Respondent 3 Illustration Streuzberg 1 person Co-working space Respondent 4 Graphic design Mitte Space Respondent 5 Handbag Prenzlauer design Berg Space Respondent 6 Dress Potsdamer design Platz Store/design Platz Store/design Showroom/office Respondent 7 Interior design Store/design Space and home office as of COVID Respondent 8 Interior design Space Are Spondent 9 Cultural agency Store/designer Respondent 10 Fashion designer Respondent 11 Festival Kollwitzkiez 20 people Office Kollwitzkiez 20 people Office	Respondent	Industry	Location	Size	Space
Respondent 2 Sweaters design Berg 1 person Co-working space Respondent 3 Illustration Kreuzberg 1 person Co-working space Respondent 4 Graphic design Mitte Space Respondent 5 Handbag design Berg Showroom Respondent 6 Dress Potsdamer 1 person Homeoffice as of COVID Respondent 7 Interior design Kreuzberg 1 person Homeoffice Respondent 8 Interior Kreuzberg 1 person Co-working showroom/office Respondent 9 Cultural Mitte 6 people Co-working space and home office Respondent 10 Fashion designer Large 1 person Atelier Respondent 11 Festival Kollwitzkiez 20 people Office	Respondent 1	Jewelry	Prenzlauer	1 person	Co-working
Respondent 3 Illustration Kreuzberg 1 person Co-working space Respondent 4 Graphic design Mitte Space Respondent 5 Handbag design Berg Spondent 6 Dress design Platz Store/ Respondent 7 Interior design Space Showroom/ Respondent 8 Interior design Mitte Space Space and home office as of COVID Respondent 8 Interior design Space Space and home office as of COVID Respondent 9 Cultural agency Space and office Space and Space Space and Space Spa		design	Berg		space
Respondent 3 Illustration Kreuzberg 1 person Co-working space Respondent 4 Graphic design Mitte 1 person Co-working space Respondent 5 Handbag design Berg 1 person Showroom Respondent 6 Dress Potsdamer 1 person Homeoffice design Platz 1 person Homeoffice as of COVID Respondent 7 Interior design Kreuzberg 1 person Showroom/office Respondent 8 Interior design Space and home office as of COVID Respondent 9 Cultural agency Showroom Space and office Respondent 10 Fashion design Charlottenburg 1 person Atelier Respondent 11 Festival Kollwitzkiez 20 people Office	Respondent 2	Sweaters	Prenzlauer	6 people	Office
Respondent 4 Graphic design Mitte Space Respondent 5 Handbag design Berg Showroom Respondent 6 Dress Potsdamer Showroom Respondent 7 Interior design Showroom/ Respondent 8 Interior design Space Albert Space and Space Albert Space and Space Showroom/ Respondent 8 Mitte Store/ Respondent 9 Cultural Agency Space and Space		design	Berg		
Respondent 4 Graphic design Mitte Respondent 5 Handbag design Berg Respondent 6 Dress design Platz Respondent 7 Interior design Respondent 8 Interior design Respondent 9 Cultural agency Respondent 9 Respondent 10 Fashion designer Respondent 11 Festival Kreuzberg/ Frenzlauer Berg Potsdamer Plotsdamer Apeople Apeople Apeople Store/ Apeople Store/ Apeople Store/ Apeople Co-working Space and home office Are pace and office Co-working Space and office Co-working Apeople Atelier Copholocophic Copholocophic Atelier Copholocophic Co	Respondent 3	Illustration	Kreuzberg	1 person	Co-working
Respondent 5 Handbag design Berg Showroom Respondent 6 Dress design Platz Store/ design Platz Homeoffice as of COVID Respondent 7 Interior design Homeoffice Respondent 8 Interior design Homeoffice Respondent 9 Cultural agency Sepace and office Respondent 10 Fashion designer Respondent 11 Festival Kollwitzkiez 20 people Office					space
Respondent 5 Handbag design Berg Berg Berg Berg Respondent 6 Dress Dreson Dress Dress Dreson Dreson Dress Dreson Dreson Dress Dreson Dress Dreson Dress Dreson Dress Dreson Dress Dres	Respondent 4	Graphic	Kreuzberg/	1 person	Co-working
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Respondent 6 Dress design Platz Platz Porson Homeoffice as of COVID Respondent 7 Interior design Respondent 8 Respondent 8 Respondent 9 Cultural agency Respondent 10 Fashion designer Respondent 11 Festival Rollwitzkiez Potsdamer 1 person Homeoffice as of COVID For a person Homeoffice as of COVID For a person For a person Homeoffice as of COVID For a person For a person Homeoffice as of COVID For a person For a person Atelier For a person At	Respondent 5	Handbag	Prenzlauer	3 people	Office /
Respondent 7 Interior Kollwitzkiez 4 people Store/ design Showroom/ office Respondent 8 Interior Kreuzberg 1 person Co-working space and home office as of COVID Respondent 9 Cultural Mitte 6 people Co-working space and office Respondent 10 Fashion Charlottenburg 1 person Atelier Respondent 11 Festival Kollwitzkiez 20 people Office		design	Berg		showroom
Respondent 7 Interior design Kollwitzkiez 4 people Store/showroom/office Respondent 8 Interior design Space and home office as of COVID Respondent 9 Cultural Mitte 6 people Co-working space and office Respondent 10 Fashion designer Charlottenburg 1 person Atelier Respondent 11 Festival Kollwitzkiez 20 people Office	Respondent 6	Dress	Potsdamer	1 person	Homeoffice
design showroom/ office Respondent 8 Interior Kreuzberg 1 person Co-working space and home office as of COVID Respondent 9 Cultural Mitte 6 people Co-working space and office agency space and office Respondent 10 Fashion Charlottenburg 1 person Atelier Respondent 11 Festival Kollwitzkiez 20 people Office		design	Platz		as of COVID
Respondent 8 Interior Kreuzberg 1 person Co-working space and home office as of COVID Respondent 9 Cultural Agency agency agency Space and office office Respondent 10 Fashion designer Charlottenburg 1 person Atelier Respondent 11 Festival Kollwitzkiez 20 people Office	Respondent 7	Interior	Kollwitzkiez	4 people	Store/
Respondent 8 Interior design 1 person Co-working space and home office as of COVID Respondent 9 Cultural agency Mitte 6 people Co-working space and office Respondent 10 Fashion designer Charlottenburg 1 person Atelier Respondent 11 Festival Kollwitzkiez 20 people Office		design			showroom/
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Respondent 9 Cultural Mitte 6 people Co-working space and office Respondent 10 Fashion designer Charlottenburg 1 person designer Respondent 11 Festival Kollwitzkiez 20 people Office		design			space and
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Respondent 10 Fashion Charlottenburg 1 person Atelier designer Kollwitzkiez 20 people Office		agency			space and
designer Respondent 11 Festival Kollwitzkiez 20 people Office					office
Respondent 11 Festival Kollwitzkiez 20 people Office	Respondent 10	Fashion	Charlottenburg	1 person	Atelier
		designer			
Expert	Respondent 11	Festival	Kollwitzkiez	20 people	Office
	Expert				

 $Table\ 2-Entrepreneurial\ changes\ and\ impact\ due\ to\ the\ Coronavirus\ pandemic$

Respondent	Industry	Digital changes Physical Impact		Impact on
			changes	business
Respondent 1	Jewelry	None	Moved to	- Revenue
	design		home office.	decrease
				- Fewer new
				projects
Respondent 2	Sweaters	Implemented an online	Moved to	- No new
	design	showroom;	home office.	business
		Took part in digital fashion		+ Community
		shows;		growth
		Implemented an e-commerce		+ Revenue
		for B2B and B2C.		increase
Respondent 3	Illustration	None	Moved to	- Revenue
			home office.	decrease
Respondent 4	Graphic	None	Moved to	- Revenue
	design		home office.	decrease
Respondent 5	Handbag	Worked on the online	Moved to	- Revenue
	design	community (Instagram,	home office.	decrease
		LinkedIn, podcasts, content,		- Slower
		activism communities);		expansion in
		Hosted webinars and online		B2B
		talks;		+ Community
		Worked on e-commerce and		growth
		branding.		
Respondent 6	Dress	Took part in digital fashion	No change.	- Revenue
	design	shows.		decrease

Respondent 7	Interior design	Improved the website.	Moved to home office.	-	Delay in new collection Reduced the collection to be safe Revenue decrease
Respondent 8	Interior	Worked on e-design.	Quit co-	+	Revenue
	design		working space		increase
			contract;		
			Moved to		
			home office.		
Respondent 9	Cultural	None	Moved to	+	More free
	agency		home office.		time and
					higher
					efficiency to
					juggle
					different
					projects
Respondent 10	Fashion	Worked on digital	No change.	-	Less side
	designer	representation;			projects
		Started with marketing and		+	More
		PR;			followers on
		Building a community			Instagram
		online.			
Respondent 11	Festival	Shifted to digital events;	Moved to	+	Lowered the
Expert		Developed digital	home office.		costs
		networking tools.			

Table 3 – Physical vs. digital products

Respondent	Industry	Product
Respondent 1	Jewelry design	Physical
Respondent 2	Sweaters design	Physical
Respondent 3	Illustration	Digital
Respondent 4	Graphic design	Digital
Respondent 5	Handbag design	Physical
Respondent 6	Dress design	Physical
Respondent 7	Interior design	Digital and physical
Respondent 8	Interior design	Digital
Respondent 9	Cultural agency	Digital
Respondent 10	Fashion designer	Physical
Respondent 11	Festival	Digital and physical
Expert		