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Published in:
De Gruyter Handbook of Media Economics

DOI:
[10.1515/9783110793444-021](https://doi.org/10.1515/9783110793444-021)

Publication date:
2024

Document Version:
Final published version

[Link to publication](#)

Citation for published version (APA):
Komorowski, M., & Virta, S. (2024). 21 Clusters in media industries: What is their added value? In U. Rohn, M. B. von Rimscha, & T. Raats (Eds.), *De Gruyter Handbook of Media Economics* (pp. 303-318). (De Gruyter Handbooks in Business, Economics and Finance). De Gruyter. <https://doi.org/10.1515/9783110793444-021>

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21 Clusters in media industries: What is their added value?

Abstract: Media clusters can be defined as agglomerations of media industry-related activities within a certain location that bring competitive advantages. Media cluster theory links research on media industries to economic geography. In economic geography the focus lies on the location of economic activities and theory of the emergence of agglomerations of companies. We can find media clusters around the world, including examples such as Hollywood, Soho in London, and Dubai Media City. These examples show that media clustering can take various forms and sizes and can create unique added value for media companies. This chapter aims to explain the phenomenon of media clusters by discussing the added value of media clustering through *spatial network effects*. Three media cluster case studies are presented to exemplify these effects, namely Media Cymru in Cardiff, UK; Mediapolis in Tampere, Finland; and mediapark.brussels in Belgium – three media clusters at different stages of development driven by policy interests.

Keywords: media cluster, spatial network effects, policy

Introduction

Media clusters can be defined in various ways. Picard (2008, p. 12) described media clusters as a “specialized form of clusters designed to produce mediated content”. Along similar lines, in this chapter, clusters are considered agglomerations of media industry-related activities within a certain location aiming at economic advantages (Komorowski & Fodor, 2020), namely at creating added value. While previous literature offers a wide range of factors regarding clusters, there have only been few attempts to group them into a comprehensive framework (for an overview of the literature see Komorowski & Fodor, 2020). The purpose of this chapter is to bring together approaches from various literature fields and to provide a more integrated approach to the study of media clusters. Thus, the chapter focuses on value added that can arise from proximity to other media-related businesses and actors, as well as local characteristics that affect media clusters, which we call *spatial network effects*.

Media cluster research connects studies on the media industry to the theories of economic geography, namely analyzing and explaining the location of economic activities and theory of the emergence of agglomerations of companies (Ottaviano & Thisse, 2005). Due to the interdisciplinary nature of the academic field, several concepts are being used to research this phenomenon. These labels include *media cluster*

(Komorowski, 2017a), *creative city* (Landry, 2008), *cultural or media hub* (Lee, 2016), *media city* (Hoyler & Watson, 2013) or *creative ecosystem*, among others (Komorowski & Picone, 2020). Each of these labels are being applied in research to describe the diverse places where media or creative production takes place. Successful examples of media clusters include Hollywood, New York, Soho in London, Berlin, Bollywood, and Tokyo (see also Komorowski & Picone, 2020; Picard, 2009). The concepts and examples indicate that various approaches in research are utilized from numerous disciplines highlighting different effects and values these places create for media industry-related activities.

The concept of industry activities' clustering has its origin in the 1920s with the book *The Principles of Economics*, wherein Marshall (1927) writes of the *industrial district*. Since then, the cluster concept has become widely circulated and used in academia with its roots in research on industrial production. Today, literature often evolves around design-intensive and high-tech industries. However, media clusters are, in comparison to other industries, still under-researched with research dating back only to the beginning of the 2000s (Komorowski, 2017b; Komorowski & Picone, 2020).

In more recent years there has also been a growing interest from governments and local authorities to use the media cluster approach in their development strategies. Examples include the mediapark.brussels project of the Government of the Brussels Capital Region in Belgium, the Media Cymru program in the Cardiff Capital Region in the UK, and the development of the Mediapolis cluster in Tampere, Finland. Each of these examples shows that media clustering takes various forms and sizes and can create unique added value for the media companies. Due to the policymakers' strong interest in the topic, the interest into media cluster research in academia is also growing. Media cluster research is indeed needed not only to support policy efforts, but also to understand the phenomenon as well as collaborative added value creation potential and challenges of media clusters in more detail (see Virta & Lowe, 2017; Virta & Malmelin, 2022). This chapter explores the value added of media clustering by highlighting spatial network effects, which are exemplified in three case studies of media clusters in practice.

Research discourse

As discussed above, research on media clusters is rooted in industry cluster research, which focuses on geographic clustering of firms that produces positive externalities and competitive advantages. This research approach is strongly focussed on the importance of location. In theory, however, due to the rise of the Internet and faster transportation also linked to globalization, authors have argued for a diminishing role of location (see e.g., Virta, 2020). This is reflected in traditional economic thinking, which highlights the aversion of companies towards competition for decades. There-

fore, one might expect companies to protect their competitive advantages (Smith et al., 2004) and not locate close to competitors. Additionally, Castells (2009) describes the arrival of a new form of society without borders, *the network society*, stressing how places are less relevant for social interaction. The idea that “the world is flat” (Friedman, 2005) and the “death of distance” (Couclelis, 1996) are all concepts challenging cluster theory. Based on such theories it seems that the importance of location is diminishing. This applies especially for industries, which produce intangible, digitizable goods and services that can travel over the internet, which is the case for the media industry.

Still, clustering tendencies of the media industry can be increasingly observed. Thus, the idea of a diminishing importance of location is not necessarily competing with current media cluster formations. This can be expressed by *glocalization*, which combines globalization and localization. The term was introduced by Robertson (1992), and it is used to describe company strategies that build advantages on local conditions and culture while balancing both local and global approaches to market their products and services (Menon, 2014). The importance of local clusters to have an international outreach has become a central challenge in the increasingly connected world to build local competitive advantages. Because of this, there is a shift in research highlighting the importance of location for businesses in a globalized context supporting the competitiveness of regions and cities.

The questions in this context are then: what are media clusters, and what is the added value of local clustering of media industry activities in a globalized world? In traditional economic theory, Porter (2000, p. 15) provides a widely applied definition of clusters: “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities”. The focus of industry cluster research often lies on how proximity of industry activities allows quick movement of labor and products and, therefore, saves costs. The so-called Italian school promoting research in this area shifted the focus. Becattini (1990) explains that cluster success is explained by the social relations among community members. The influence of the Italian school can be observed till today in research. Głowacki (2020), for example, focuses his research on social interaction in co-working spaces. Virta and Lowe (2017), as well as Lowe and Yamamoto (2016), emphasize the importance of collaboration for the success of media industry clusters. Krugman (1991) adds a new dimension to the original observations of the Italian school, explaining the *added value of clusters* through the process of innovation that takes place through the transfer of information, know-how, and experiences.

Alongside industry clusters, one should not overlook influential literature stemming from urban policy approaches in this context. Most noteworthy in this regard are Florida (2005) and Landry (2008) with their *creative city* and *creative class* approaches. Both authors highlight the importance of the creative economy for cities as people are the key resource and creativity the key principle of urban dynamism. With the media sector being part of the creative industries, it becomes clear how insights

from this literature field can further help to understand the added value of media clusters.

As shown, there is a multitude of different approaches to describing clusters and their added value. Still, the application of these approaches is rather limited regarding understanding the added value of media clusters with media production being fundamentally based on collaboration (Davis et al., 2009). Many leading authors in this field focus on different industries, like manufacturing industries, high-tech clusters, or arts and craft workshops. Media clusters are, in comparison, still rather under-researched (Komorowski & Picone, 2020). Additionally, the media industry has distinctive features differentiating it from other industries. These include, for example, the production of intangible and experience goods like content and media services, the dependence on creative processes, the large number of freelancers in the industry, and the project-driven and strongly collaborative nature of media production. Furthermore, media products and services are driven by local contexts, such as language and cultural differences. While these distinctive features make media clusters in their functioning distinctive, the media industry has, at the same time, been recognized as one of the industries that are highly agglomerated (Picard, 2009) around the globe.

Additionally, there is a variety of media clusters with unique features to observe as examples. Bathelt and Gräf (2008) study Munich's audio-visual cluster's added value by looking at the *local buzz*, which includes local interactions and interaction with external firms and markets, through trans-local or global *pipelines*, which refer to connections with the wider context, including international and global actors. Cook and Pandit (2013) analyze UK-based broadcasting clusters looking at trust (social relationships), cooperation, and non-market relations. Krätke (2002) describes the Babelsberg Film Studio as an audio-visual cluster that has formed around a studio complex. Komorowski (2017a) attempts to create a typology that helps distinguish the types of media clusters, highlighting that the value added of a media cluster and how it should be analyzed depends on the scale of the media cluster (from small local to large regional media clusters) and the scope of the media cluster (from very specialized to broad clusters covering multiple media companies with different sector activities). van Heur (2009) argues that policymakers often neglect differentiating factors that influence the functioning of clusters, thus hindering the success of policy projects. Thus, it is important to take the various types of media clusters and the unique functioning of the media industry into consideration when researching the value added of media clusters.

The value added of media clusters: Spatial network effects

In order to understand the value added of media clusters, the concept of network effects (or network externalities) is a useful tool. Network effects have been mostly described and analyzed in economics literature. G. Swann (2002, p. 417) explains network effects as the “benefit that accrues to the user of a product or service because he or she is one of many who use it”. The idea centers around how the value of membership to a certain network is positively correlated to the size of the network. This is best quantified by Metcalfe’s law (Katz & Shapiro, 1994). Additionally, research differentiates between direct and indirect network effects. Clements (2004) formulates helpful examples: The usage of telephones becomes more valuable to individuals as the number of users increases. This describes a direct network effect. On the other hand, a video-on-demand platform, like Netflix, becomes more valuable to its users as the number of available movies to watch on it increases, which in turn increases as the total number of subscribers is growing. This example describes indirect network effects.

We suggest using the concept and add a spatial dimension to it to describe value added of media industry activities in certain places, i.e., media clusters. To the best knowledge of the authors, the network effect has not been used to explain spatial clusters so far, rather only to explain wider spatial networks in, for example, transport of geographic data analysis (e.g., Liu, 2022). We argue for a holistic approach to media cluster research, which takes into account two spatial network effects: the (1) direct spatial network effects and (2) indirect spatial network effects (see Table 21.1).¹

Table 21.1: The direct and indirect spatial network effects in media clusters.

	Direct spatial network effects	Indirect spatial network effects
Definition	The value of being located in a media cluster increases with an increasing number of media businesses in the cluster.	The increasing number of businesses in a media cluster influences the local conditions, which in turn increases the value for the business and attracts more businesses.
Examples	<ul style="list-style-type: none"> a. Faster mobilization (cost saving) b. Knowledge exchange /spillover effects c. Competitive advantages through scale d. Reputation and branding of the cluster 	<ul style="list-style-type: none"> a. Needed facilities for media production b. Focal points of media production c. Urban infrastructures

¹ The differentiation into these two spatial network effects is partly inspired by the media cluster typology by Komorowski (2017a) and the drivers of media clusters by Komorowski and Fodor (2020).

Direct spatial network effects in media clusters

Direct spatial network effects explain media clusters' functioning by highlighting the value added for media businesses when additional media businesses join the same cluster. In industry cluster and economic geography research, this effect has been coined as agglomeration economies (Beaudry & Schiffauerova, 2009) or as critical mass (Szanyi et al., 2010).

Earlier research shows that media clusters connect producers in networks and projects to promote and improve media services and content production (Krätke, 2003). According to empirical research by P. Swann and Prevezer (1996), clusters in industries with multiple linkages among members through proximity exhibit noticeably stronger growth patterns than clusters in industries featuring fewer linkages among members. For the media sector this seems specifically relevant, as it is mostly based on project-driven media production, wherein multiple companies and freelancers that complement each other across the value chain often work on short-term projects on a regular basis. The value-added lies then, for example, in the ability of a media cluster to mobilize labor for projects.

Direct network effects in media clusters can also explain how media companies benefit from spillover effects and knowledge flows, which impact the innovativeness of the cluster members. Also, in literature, the importance of the network perspective highlighting knowledge creation and exchange has taken a prominent role (see Breschi & Lissoni, 2001). Many researchers have emphasized the value of in-person connection in media clusters (e.g., Jackson, 2020). In this context, the larger the network, the more knowledge flows and spillovers within a cluster can occur, which creates additional value for media companies. This happens also through labor mobility among firms and the overall *buzz* in clusters. Malmberg and Maskell (2002) emphasize that a vibrant cluster is dependent on both high levels of *local buzz* and on outward-looking *pipelines*, both describing different kinds of vibrant interaction and learning either locally or trans-locally / globally (see also Bathelt, 2005).

Another example for direct spatial network effects in media clusters is the reputation that clusters can create. Wijngaarden et al. (2019) find that place reputation serves an essential role in clusters as a pull-factor for creative workers. Direct network effects can be described in this case as the spillovers of a reputation or brand in a value-added sense. When a media business is located within a cluster, in which many highly successful, innovative, and creative firms are located, they are perceived as innovative, successful, and creative themselves (see also Komorowski & Fodor, 2020). Cook and Pandit (2007, p. 462) explain that “there is clearly a dynamic at work where the reputation of particular regional centres [...] attracts talent which makes the centre a more desirable place to do business”. For the media sector, which produces experience goods and services with high uncertainty (Hong & Pavlou, 2014), reputation and branding are key economic advantages. Cluster initiatives often set-up by policymakers are used to promote the cluster and to enhance brand image (Sölvell et al., 2003).

Indirect spatial network effects in media clusters

Indirect spatial network effects in media clusters differentiate themselves from direct spatial network effects by creating value added for media companies indirectly. This means that the value added is not based on additional media companies in a cluster, but that the increasing number of companies in a cluster influences the location, which in turn creates value for media companies. More concretely, the local conditions create the value added. In industry cluster research, concepts such as *localization economies* or *urbanization economies* have been used to describe such effects (Beaudry & Schiffauerova, 2009). Through these effects, the place where a media cluster is located becomes a platform where structures and conditions that attract companies are offered.

This can be exemplified by facilities that are needed for media production. Achtenhagen (2011) describes how media clusters typically integrate local facilities and resources. Goldsmith and O'Regan (2003) highlight the role of the *studio complex* and argue that audio-visual clusters form around facilities that enable the production of audio-visual content. Examples are numerous, such as the Babelsberg movie studio complex, the Pinewood Studios Group, and the Film i Väst in Trollhättén. The more extensive and better the facilities for media production, the more value they create for media businesses in the cluster. This creates a further indirect effect when an increasing number of media cluster members leads to increased investment in expanding the facilities.

Another example of indirect network effects of media clusters are so-called *focal points*. Komorowski (2017a) defines focal points in media clusters as one or more prominent institutions. For example, Barnes and Coe (2011) analyzed EA Canada as the focal point of the video game cluster in Vancouver. Vang (2007) found that physical proximity to significant authorities and events is a prerequisite for the concentration of newspapers. This explains, for example, the press-related media cluster in Brussels. Here again, the number of media activities influences the local conditions, which in turn may attract more media businesses.

It is widely acknowledged that the media industry typically clusters in major urban areas. It has been argued that closeness to an urban milieu integrating cultural facilities and after-work offers (cafes, restaurants, nightlife) attracts media workers (cf. Florida, 2003). An example could be Soho in London, which is known for both its concentration of media companies and cafes and bars. Other urban characteristics may include access to many potential customers (e.g., newspapers in large cities); access to transport infrastructure, including public transport and proximity to an airport and international railways; high-speed internet; and access to supporting institutions, universities, and research institutions. An example of how such important infrastructures create these indirect effects is the Sohonet (Harris, 1997). Established in 1995, Sohonet is a private network that enables the transfer of large audio-visual files between studios and post-production companies. It also connects London-based companies to Hollywood, en-

abling international collaborations in real-time. The scale of both media clusters enabled the needed investment to set up Sohonet.

Understanding media clusters in practice: Case studies

While the introduced approach to understanding the value added of media clusters through spatial network effects attempts to give a holistic research framework for media cluster analysis, it needs to be noted that the spatial network effects in each cluster are unique. This is because every media cluster is unique and embedded in local preconditions and structures of the place. Additionally, policy context plays a major role. As highlighted above, there has been increasing interest by policymakers to support media cluster formation. This may be explained by the added value expectations regarding the creative industries. As an example, in the United Kingdom the Gross Value Added (GVA) of the creative industries grew faster than GVA of the UK economy as a whole (44% vs. 17%) between 2010 and 2019 (Department for Digital, Culture, Media and Sport [DCMS], 2022). Also, different EU-level programs and funds have been set, which might directly or indirectly benefit cluster development among other aims. These include, for example, the European Regional Development Fund (ERDF), Creative Europe, COSME and calls within Horizon2020 (new HorizonEurope), and the *European cluster approach for growth* strategy, comprising the European Cluster Observatory and the European Cluster Collaboration Platform. On city and regional levels such cluster development programs have often been around large urban or real-estate development projects. These include, for example, Mediacity Bergen, Digital Media City in Seoul, Media Park Beijing, Dubai Media City, Moore Park Sydney, Media Park Hilversum, and MediaCityUK.

However, academics have questioned if media cluster formation and the creation of added value through media clusters can be supported by policy intervention. Krugman (1991) found that the emergence of clusters can only be traced to seemingly historical accidents. Ketels (2003) argues that clusters develop over time, and they are not a phenomenon that just appears or disappears overnight. Furthermore, there is no widely acknowledged approach of measuring and assessing the value added of (media) clusters, despite the many techniques utilized to do so (Brown, 2000). The same applies to how policymakers can potentially have an impact on the direct and indirect network effects enabling value creation in media clusters.

Below we introduce three case studies of media clusters that have been supported by policy measures like financing, city planning and zoning, infrastructure and traffic solutions, or production incentives, to name a few. The short case descriptions exemplify how spatial network effects take place in media clusters in practice and how policy can have an impact on them.

Media Cymru: From one of the most deprived regions in the UK towards building a striving film and TV cluster

Media Cymru (<https://media.cymru/>) is a UK£ 50m project running from 2022–2025 funded through UK Research and Innovation’s program Strength in Places Fund, the Cardiff Capital Region (CCR), and the Welsh Government (through Creative Wales), bringing industry and university partners together with the goal to create a media cluster in the CCR in Wales. Today, the local cluster has been described as the third largest film and TV cluster in the UK (after Greater London and Manchester) (Komorowski & Fodor, 2021).

The development of the film and TV cluster in the CCR can be traced back to local conditions that have supported a Welsh independent sector (the commissioner S4C – the Welsh language public service broadcaster – producing exclusively Welsh content) and enabled the building of TV and movie studio infrastructure in the last decade. Based on a history of coal mining and heavy industry, Wales has faced issues with industrial decline, meaning infrastructure was available in Wales to repurpose. For example, Dragon Studios occupies 1,000 acres that previously were an open-cast coal mine. Wales had, as of 2022, the largest stock of film and TV studios outside London and the South East of the UK, making up 13% of the total stock in the UK, while benefitting from an upsurge of investment into film and TV in the UK (Bird, 2022). Another factor that had a considerable impact was the BBC’s commitment to move investment and production *Outside London*, which over the last years led to the BBC opening a new state of the art building in Cardiff and devolving UK staff to the Welsh capital. The BBC contributed over UK£ 200m in gross value added and over 2,000 jobs to the Welsh economy in 2022, and it is a focal point in the region (PricewaterhouseCoopers [PWC], 2022).

Building on these developments, various levels of government have acknowledged the potential of the media industry for driving economic growth in the region. In 2019, Clwstwr (<https://clwstwr.org.uk/>), a five-year program to create new products, services, and experiences for screen in Wales was created, funded by the Arts and Humanities Research Council, making Cardiff one of nine Creative Industries Clusters funded across the UK and Scotland. Media Cymru was built on the Clwstwr program. The policy support creates new investment, which focuses on funding research and development in the media sector, building innovation capacities and knowledge spillovers, and creating new infrastructure and resources to enable further direct and indirect spatial network effects to take place in the region.

mediapark.brussels: A media cluster in development driven by policy and supplier networks

With its roots already in the Regional Development Plan from 1995 (Perspective.brussels, 2023), the Government of the Brussels Capital Region is developing *mediapark.brussels* (<https://mediapark.brussels/>), an urban and property development project in the Reyers neighborhood, located in the Municipality of Schaerbeek in Brussels. The two public broadcasters for the Flemish and Francophone languages, respectively, as well as other media businesses, are already based in Reyers today. The project will result in a thorough reorganization of the neighborhood, with the construction of two new buildings for the public broadcasters in addition to more office space, homes, commercial buildings, and park areas. It is foreseen that the first parts of the *mediapark.brussels* will be ready by 2026.

Mediapark.brussels is led by four major project partners: the Brussels Capital Region, through the Agency for Urban Development (SAU- MSI); the Municipality of Schaerbeek; and the two public broadcasters RTBF and VRT. Important local media players have already committed to re-locating to the new *mediapark.brussels* once the infrastructure is available. This includes *screen.brussels*, the local fund for audiovisual and digital productions, and local public and semi-public organizations such as the Brussels television station BX1, the journalism and communication school IHECS Academy, and the Brussels Video Centre. The *mediapark.brussels* project aims to create a “lively neighbourhood for creatives, innovators and media workers” and to “strengthen the international position of the city relative to other European capitals and the neighbouring regions by fostering growth in the media industry” (see <https://mediapark.brussels/>).

Both public broadcasters are focal points for media activities in the Reyers neighborhood, enabling strong direct network effects. The kick-off of the project was, however, dependent on the right timing: the public broadcasters were looking for new buildings and selling part of the site to finance them; the commune of Schaerbeek was looking for a solution to the mobility issues surrounding the site; and the Urban Development Agency was granted European development funds to invest in a Media House – all contributed to the right momentum for the project. The project aims to be an economic impulse, a mobility solution, an international attraction pole and a housing project simultaneously. While these ambitions could support the creation of various (direct and indirect) spatial network effects, the effect the investment will have to be seen in the future. It is still an interesting case to exemplify the various policy competencies and ambitions that governments have in media cluster development (for more information, see Picone et al., 2020).

Mediapolis: From a real-estate project to collaborative value creation network

The Mediapolis (www.mediapolis.fi/en/) cluster is situated in the Tohloppi district in Tampere, the third largest city of Finland. The cluster development started in 2011, and the actual cluster started operating in 2013. Strong public support by Tampere City, as well as regional authorities, has characterized Mediapolis creation from the start, and it has been a crucial prerequisite for its development. Mediapolis development was and is, for example, included in the Tampere City strategy. Initially, Mediapolis was a brownstone creative cluster project, which means that it had a real-estate base. The premises were previously owned and operated by the Finnish public broadcasting company Yle. Yle's new strategy aimed at increasing cooperation with media industry partners, including promoting the vitality of the creative industries in Finland. Additionally, Yle wanted to diminish real estate ownership, which led to selling the premises to Technopolis Plc, with Yle remaining as a main tenant and focal point of the cluster.

From the beginning, Mediapolis focused on enhancing cross-sector collaboration and networks among organizations in the media industry and beyond. The aim was to create value by enhancing media innovation and new content production in the Tampere area. The case started as a spatial arrangement, but the focus was on creating collaborative value between the cluster participants both on site and more broadly, even internationally. During the first decade of its operation, Mediapolis development has comprised several phases and faced multiple organizational and operational challenges that have been evident as tensions of collaboration (see Virta, 2020).

In the initial phase after the renovation of the premises, the first production companies and educational institutions moved to the site. This was followed by an attempt to create a joint management model, including a co-operative company as a temporary solution. A new studio facility was built by Yle on the premises, and productions were moved from Helsinki to Mediapolis to attract production companies and program makers to use the site. The real estate operator changed when Technopolis sold the property to Hemfosa Fastigheter in 2019. In 2023, a production incentive (around 10–15% regional cash rebate) offered by Tampere City and administered by Film Tampere was introduced to increase Mediapolis' international outreach.

As the case description shows, both direct and indirect network effects have played a role in the creation and development of the Mediapolis cluster. Yle's commitment as focal point in the cluster operations and the collaborative efforts for finding a suitable model for cluster management were crucial. However, indirect network effects being available in the Tohloppi district at first and by further investment in studio facilities, intervention from Tampere City and regional authorities in the form of policy and financial support, as well as logistics, infrastructure and zoning, were also needed. Tohloppi is not a major urban milieu, except perhaps regarding the closeness to educational institutions. Also, the Mediapolis community has emphasized networking

and collaboration, and the relations to local governments have been tight and mutually supportive.

Discussion and conclusion

This chapter has provided an overview of media cluster research and approaches linked to industry cluster and urban policy research. The here-presented approach of spatial network effects attempted to create a holistic research concept for media cluster analysis taking into consideration the unique features of media industry practices and how media clusters create value. The case studies highlighted how spatial network effects present in media clusters can be further supported through policy interventions from financial investments to infrastructure and network building, and more. For a future research agenda in the field of media cluster research, we give the following recommendations.

As has been discussed, governments on all levels are starting new projects and initiatives, and a considerable amount of investment is being made in the development of media clusters. Research that influences these policy ambitions is often focused on single case studies or other industries overlooking the particularities of the media sector. More research attention needs to be paid to a holistic view on media clusters and their unique characteristics. This chapter touched a variety of research fields and calls for a more universal research agenda in this regard.

Previous authors such as Martin and Sunley (2003) have argued that the industry cluster concept has been conflated and used to equate quite different types, processes, and spatial scales of economic localization under a single notion. At the same time, many studies are built on single case studies, thereby creating assumptions that are then generalized to a variety of clusters. This chapter has highlighted that every media cluster is unique. Research should always keep in mind that a one-size-fits-all research approach is often not valid regarding media clusters. Acknowledging differences and similarities simultaneously is important to create universal insights and to give informed policy advice based on these insights. Research questions like *How may policy support enhance and/or hinder media cluster development?* or *What are the impacts of policy on media cluster and its potential to produce added value?* could lead the way to a more coherent understanding of the phenomenon.

Furthermore, the criticism around the cluster concept stated by previous authors must be considered. We advise taking a cautious approach towards cluster support, and not to assume that all investments into cluster development by policymakers will create the intended effects. For example, Asheim et al. (2006, p. 20) state that “rather than being a model or theory to be rigorously tested and evaluated, the cluster idea has instead become accepted largely on faith as valid and meaningful”. There is a tendency in literature to generally support the idea of the non-arguable benefits of co-locating

industry activities, which is why such concepts have been increasingly adopted by policymakers. So-called lock-in effects in media clusters that bind companies to locations despite disadvantages posed by the location could take place. This is a research area still largely overlooked. Taking a closer look into research questions like *What are the potential disadvantages of cluster development?* and finding ways to overcome those would be needed as future research interest. This is connected to issues of *How to measure the value added of media clusters?*, which would be relevant for future research.

Finally, we encourage future research to analyze the here-presented concept of spatial network effects in more detail and to apply it to different media clusters for validation, as well as to adjust the concept where needed. The here-discussed network effects are only partly researched already in detail while some network effects are still to be analyzed. This includes, for example, how media clusters are branded and create a reputation for media companies. We acknowledge that value-added effects of media clusters would also merit further investigation, and applying the approach can close existing research gaps, including ways to measure the impacts – both beneficial and detrimental – of media clustering and respective policy initiatives.

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