Deliverable 1.1c: Report on Classifying Media Clusters into a Typology
Komorowski, Marlen

Publication date:
2016

Document Version:
Final published version

Link to publication

Citation for published version (APA):
Report on Classifying Media Clusters into a Typology

Marlen Komorowski – June 2016

Part of Work Package 1:
Conceptual coordination of mapping Brussels’ media industry
Media Clusters Brussels – MCB – is a collaborative and interdisciplinary research project of the Brussels Capital Region involving the three leading universities of Brussels, VUB, ULB and USL-B. The aim is to analyse the many facets of the media industry located in the Brussels Capital Region and explore the development of clusters.

The Projet de Plan Régional de Développement Durable / Ontwerp van Gewestelijk Plan voor Duurzame Ontwikkeling for Brussels (2013), approved by the Brussels Regional Government on 12th December 2013, identifies the cultural and creative industries as one of the four key sectors of the metropolitan economy, and more specifically proposes a media city at Reyers as the first strategic cluster (Pôle Reyers) to develop. However, despite the fact that the Brussels Region is committed to foster the development of the media sector, there is up until now hardly any empirical data available about the structure and dynamics of the media industry in Brussels. This project aims at creating socio-economic value for the media industry in the Brussels Region and beyond by providing decision-makers with the in-depth knowledge they need regarding the media industry in Brussels while accompanying the phases of implementation of the Pôle Reyers. The overarching research question is: How can the structure and dynamics of the media sector in the Brussels metropolis be enhanced to improve its social and economic roles?

MCB is divided in six Work Packages. Work Package 1 offers a general overview, definitions and common framework of the project. Work Packages 2 & 3 focus on Brussels media institutions by studying Brussels’ media clusters from a macro and socio economical perspective. Work Packages 4 & 5 focus on the media workers within Brussels from a micro perspective and Work Package 6 on the communities the media workers form to create interactions and communities of learning from a meso perspective. These three points of interest, media institutions, media workers and media communities, enable MCB to grasp all dynamics of media clusters in Brussels.

More information on the Media Clusters Brussels project is available on the Internet (www.mediaclusters.brussels).

The project is financed by Innoviris under the Anticipate programme (Prospective Research – Anticipate – 66 – 2014/2018).
Scope of this report

This report is dedicated to **Work Package 1** – Conceptual coordination of mapping Brussels’ media industry. Work Package 1 is committed to develop the overarching concepts for the three levels of the other Work Packages, media institutions, workers and communities. This Deliverable was built on the 7P framework developed in Deliverable 1.1b. The output is a novel typology of media clusters, that will enable comparison of Brussels’ media clusters with other media clusters around the world and create benchmarking possibilities for Brussels. The typology will further enable more specific localization and description of dynamics within Brussels’ media clusters along all Work Packages. The findings of this Deliverable will be used within the other Work Packages to guide the analysis of the media industry and the media-clustering phenomenon in Brussels and beyond.

Deliverables that are built on the findings here are:

- Deliverable 2.3b
- Deliverables of Work Package 3
- Other Deliverables of Work Packages 4, 5 and 6

---

1 The findings of this Deliverable have been published in 2017 in the European Planning Studies journal. The content of this Deliverable has been shortened for the article version. Find the journal version online at [http://www.tandfonline.com/doi/full/10.1080/09654313.2017.1303823](http://www.tandfonline.com/doi/full/10.1080/09654313.2017.1303823).
Key findings

**Why do we need a novel typology of media clusters?**

In literature, already rich discussions on taxonomical and typological issues in (media) cluster research exist. But the developed typologies have limitations:

- Typologies existing are not widely adopted and come mostly from industry cluster research. No specific media cluster typology is established yet.
- Typologies developed are normally based on literature and conceptual approaches. Empirical testing is limited.

Therefore, there is a need for a novel typology for media cluster research which integrates not only existing discussions but also quantifiable proof.

**How do we establish a valuable media cluster typology?**

- The prolific number of case studies on media clusters, that can be found in literature is utilized. Looking at a collection of case studies shows value as in-depth data is described in them.
- 43 valuable case studies have been identified and analysed in a cross-case comparison to establish a novel typology based on the 7Ps (Deliverable 1.1b).
- It needs to be taken into account that there are limitations as the identified case studies can be biased and not evenly distributed.

It is encouraged to further test the findings and enrich it with additional case studies to overcome these limitations.

**What are the results and how can future research benefit?**

The media cluster typology is made up of six media cluster types that can co-locate and be part of each other at the same time:

1. The Creative Region
2. The Giant Anchor
3. The Specialized Area
4. The Attracting Enabler
5. The Real Estate
6. The Pooling Initiative

The six types can be differentiated by their geographical scale and specialization grade and can co-locate. The novel typology enables media cluster researchers and politicians to create more accurate identification methods, to make case studies more generalizable, to benchmark media clusters in more detail, to identify more suitable approaches for media cluster analysis from case to case, to untangle confusion in debates and to decide on suitable action points in policy.
Table of contents

Scope of this report ................................................................. 3
Key findings .............................................................................. 4
Table of contents ..................................................................... 5
Introduction ................................................................................ 6
Part 1: (Media) cluster typologies in literature ......................... 7
  Approaches existing ............................................................... 7
  Strengths and weaknesses of existing approaches .................... 10
Part 2: Methods and limitations............................................... 11
  Towards a novel typology for media clusters .......................... 11
  The scope and framework ..................................................... 12
  The case studies .................................................................. 13
Part 3: The findings - a novel typology ..................................... 18
  The six types of media clusters .............................................. 18
    1. The Creative Region ....................................................... 18
    2. The Giant Anchor ........................................................ 19
    3. The Specialized Area ..................................................... 20
    4. The Attracting Enabler .................................................. 21
    5. The Real Estate ............................................................ 23
    6. The Pooling Initiative .................................................... 24
  Towards an integrative media cluster typology ...................... 26
Conclusion and implications ..................................................... 28
Appendix 1: References ............................................................ 32
Appendix 2: Case studies analysed (43) ................................... 49
Appendix 3: Case studies analysed per typology (16) ............... 51
Introduction

Many authors recognized in the last decade that the media industry is characterized by heavy concentration in certain locations (Boix, Hervás-Oliver, & Miguel-Molina, 2015; Karlsson & Picard, 2011). These concentrations are often defined as ‘media clusters’. Among scholars, the common assumption is that locating related actors in a regional agglomeration brings advantages. Hence, a push of governments to foster the development of media industries at the local and regional levels is occurring based on the concepts and ideas of media clusters. While the rush to employ ‘cluster ideas’ has been to the forefront, many fundamental conceptual and theoretical questions are not answered yet (Martin & Sunley, 2003).

One of the most fundamental issues with the analysis of media clusters is the comparability of the phenomenon. For instance, how can cluster characteristics that were researched on audio-visual (AV) companies in London’s Soho be compared to Berlin’s new media cluster? This is similar to the idea of the often neglected aspect of spatial patterns of co-location of clusters sharing the same geographical space (Boix et al., 2015). For instance, is Greater London a media related cluster or should Soho in London be seen as a separate media cluster? There is a problem with existing categorizations as they do not make clear distinctions. Therefore, the main research question of this Deliverable is: How can different media clusters be classified into a typology?

A novel typology can not only support future research in the field of media clusters, but also support policy debates. While there is a recognized lack of evidence-driven, comprehensive research on media clusters, case studies in that field are more than abundant. In order to find a novel typology, an inductive analysis of 43 case studies of media clusters has been conducted. The first part of this Deliverable analyses existing typologies and classifications in media cluster and cluster research. The advantages and disadvantages of existing approaches will be highlighted. The second part explains the methodology and the cases used in the research. In the third part, the novel typology of media clusters is developed. The Deliverable concludes by exploring the strengths and weaknesses concerning application in research and praxis.
Part 1: (Media) cluster typologies in literature

Approaches existing

Boix et al. (2015) explain that there is an intense discussion in the literature about the notion of clusters, especially concerning taxonomical and typological issues (see Table 1). In the domain of media cluster research, no dedicated publications on the development of media cluster typologies could be identified.

Still, Picard (2008) gives in his work some exploratory insights. First, he distinguishes media clusters on the basis of their sector: (1) AV clusters; (2) new media clusters; (3) creative industry clusters and (4) print media clusters. However, a delineation into sectors might be helpful in research, but merely displays the reality. The media industry is influenced by converging tendencies and the development of new technologies. For instance, an AV cluster based on broadcasters operates today with actors of the new media industry. Second, Picard (2008) refers to Goldsmith and O’Regan (2003). They analysed the so-called studio complex and argue that AV clusters actually take three possible forms: (1) the production precinct, which services production; (2) the cinema city complex, which is oriented towards film and production drama work; and (3) the media city, which includes all features of the cinema city and also broadcasting production facilities. Such a distinction is much more helpful, especially in practical implications of creating an AV cluster. But, this typology is still limited to only a small proportion of existing possible media cluster types. Third, Picard (2008) observes three primary types of media clusters based on how they originated: (1) spontaneous clusters driven by needs; (2) planned clusters, which are created and promoted by authorities; and (3) real estate-driven clusters created through private interests that acquire and develop real estates. Fourth, this distinction also leads to a division by the operational characteristics by Picard (2008): (1) managed clusters that are overseen by professional managers; (2) cooperative clusters that provide collaborative activities and (3) unmanaged clusters without a structured organization. The origins and the operational characteristics of media clusters play an important role in finding different types of media clusters, but are not detailed enough to cover all forms of media clusters so far.

When looking for typologies in the cluster literature, articles on general industrial clusters are more particularized. Markusen (1996), for instance, distinguishes different types of clusters based on an inductive analysis of metropolitan regions in the US, starting from the concept of ‘new industrial districts’: (1) the Marshallian new industrial district based on small and medium-sized companies; (2) the hub and spoke district based on one or several large firms.
with numerous suppliers; (3) satellite industrial platforms based on medium and large branch plants and (4) the state-centred district clusters that comprise large public or non-profit entities and related supplying firms. The focus on this distinction lies in the composition of players in the cluster. Gordon and McCann (2000) later developed a typology on industrial clusters, depending on the dominant characteristic process occurring. Referring to Markusen’s (1996) typology, they claim that their typology is in contrast built on a deductive approach and test their assumptions with quantitative data from the area of London. The types are (1) the model of pure agglomeration, based on geographical proximity that enables job matching and economies of scale and scope (agglomeration economies); (2) the industrial complex model, based on input–output linkages and co-location in order to minimize transaction costs; and (3) the social network or club model, focusing on high levels of social integration, interaction and trust. Both Markusen (1996) and Gordon and McCann (2000) give rich insights into how a cluster can be formed and what drives them. Similar to this approach, Vom Hofe and Chen (2006) use already established concepts that root in the agglomeration economies literature and propose to group clusters into ‘comparable’ classifications: (1) industrial clusters ‘à la Marshall’ that are based on localization economies; (2) clusters based on inter-industry relationships that can be found in input–output tables and (3) cluster concepts according to Porter (1990) that encompass a wide spectrum of explanations (cf. Boix, Hervás-Oliver, & De Miguel-Molina, 2012). Dicken (2007) referring to Markusen (1996), on the other hand, develops his own distinction into simply two types that are both based on the notion of externalities and both rely on the idea that the ‘whole’ (the cluster) is greater than the parts because of the benefits spatial proximity provides (cf. Eriksson, 2011): (1) generalized clusters that occur in urban areas through cost reductions and the need of a variety of facilities that are established in cities and (2) specialized clusters that form in ‘industrial districts’ benefitting from localization economies and linked production networks.
Table 1 – Existing (media) cluster typologies in literature.

<table>
<thead>
<tr>
<th>Source</th>
<th>Approach taken</th>
<th>Distinctive feature of typology</th>
<th>Typologies identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picard (2008)</td>
<td>Media clusters</td>
<td>Sectors</td>
<td>(1) Audio-visual</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) New media</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Creative industry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(4) Print media</td>
</tr>
<tr>
<td>Picard (2008)</td>
<td>Media clusters</td>
<td>Origins</td>
<td>(1) Spontaneous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Planned</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Real estate driven</td>
</tr>
<tr>
<td>Features:</td>
<td></td>
<td>Organically driven by needs of large companies</td>
<td>Created / promoted by authorities</td>
</tr>
<tr>
<td>Picard (2008)</td>
<td>Media clusters</td>
<td>Operational characteristics</td>
<td>(1) Managed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Cooperative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Unmanaged</td>
</tr>
<tr>
<td>Features:</td>
<td></td>
<td>Professional managers</td>
<td>Collaborative activities from within</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Hub and spoke district</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Satellite industrial platforms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(4) State-centred district</td>
</tr>
<tr>
<td>Features:</td>
<td></td>
<td>S and SMEs / inter-firm trade / collaboration / institutional support</td>
<td>L firms with smaller suppliers / inter-firm trade / networking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Industrial complex model</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Social-network or club model</td>
</tr>
<tr>
<td>Features:</td>
<td></td>
<td>Agglomeration economies</td>
<td>Input-output linkages / minimize transaction costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Clusters based on inter-industry relationships</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Cluster concepts (cf. Porter)</td>
</tr>
<tr>
<td>Features:</td>
<td></td>
<td>Localization economies</td>
<td>Input-output linkages</td>
</tr>
<tr>
<td>Dicken (2007)</td>
<td>Externalities through proximity</td>
<td>Specialization / place</td>
<td>(1) Generalized clusters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Specialized clusters</td>
</tr>
<tr>
<td>Features:</td>
<td></td>
<td>Urban areas / cost reductions / city facilities</td>
<td>Industrial districts / localization economies / linked production</td>
</tr>
</tbody>
</table>
Strengths and weaknesses of existing approaches

Existing typologies focus either on the composition of the cluster (e.g. the size of the players, the sector) or on the functioning of the cluster (e.g. through organization, through agglomeration economies) (see Table 1). However, it is necessary to bring both scales into consideration when developing a typology. Additionally, there is no detailed typology for media clusters in the literature yet and research in this field is still scarce. It can be claimed that the presented typologies are not widely adopted or acknowledged. Additionally, typologies seem to be based on literature studies and existing conceptual approaches. The extent of empirical testing of typologies has been surprisingly small. Therefore, this Deliverable claims that a typology of media clusters needs to be based on real-world clusters going away from purely conceptual typologies while considering the diversity and complexity of the media industry in the digital age.

Still, this Deliverable acknowledges that existing typologies give usable insights and should be therefore consulted for guidance. Each cluster is unique as a result of differences in industry sectors, number and sizes of firms, purchase-sale linkages, and extent of inter-firm cooperation and collaboration to mention a few. Most of the authors argue, however, that shared characteristics among clusters permit grouping into general types. This Deliverable also takes this position and claims that distinctive features used in the typologies analysed above should be used for a novel typology. Nonetheless, there is a need for a more sophisticated methodology of classifying media clusters based on the existing media cluster research as so far, no typology could be established as widely approved approach that fully grasps the differences and similarities between media clusters.

Table 2 – Why do we need a novel media cluster typology?

In literature, already rich discussions on taxonomical and typological issues in (media) cluster research exist. But the developed typologies have limitations:

- Typologies existing are not widely adopted and come mostly from industry cluster research. No specific media cluster typology is established yet.
- Typologies developed are normally based on literature and conceptual approaches. Empirical testing is limited.

Therefore, there is a need for a novel typology for media cluster research which integrates not only existing discussions but also quantifiable proof.
Part 2: Methods and limitations

Towards a novel typology for media clusters

The typology developed in this Deliverable is constructed through a process of inductive inquiry of the literature. The media cluster literature offers a prolific number of case studies, making knowledge on the matter fragmented (Karlsson & Picard, 2011). Fortunately, the existing case studies provide rich and valuable evidence on media clusters. While no single case study is open to generalization, the value of a collective of case studies is obvious. Therefore, this Deliverable builds on the findings of previous authors to build generalizable proof for media cluster research. Existing case studies are depicted as especially sutitng as they are generally used to investigate a phenomenon in real-life context (Yin, 2003) and offer in-depth data (Eisenhardt & Graebner, 2007). Reliability of insights is given as numerous cases have been analysed, enabling theoretical ideas to emerge (Langley, Smallman, Tsoukas, & Van de Ven, 2013).

The method established in this Deliverable involved a two-stage process. First, existing case studies on media clusters in academic and institutional publication were identified. In total, more than 50 case studies have been recognized through a process searching in online databases and the comparison of the case study literature found in referenced articles. The so-called snowball approach was used. Given the primary goal to create a typology for media clusters, a number of case studies have been excluded. Case studies were excluded when (1) the place identified in the case reoccurred in other studies, (2) the study was too narrowly focused to provide necessary information and/or (3) the study focused on localization. This technique was applied within the analysis process and reduced the number of cases to 43 (see Appendix 2).

Second, these case studies have been analysed and compared. Comparing cases enables a replication logic, which is central in theory building. Therefore, the novel typology 'is situated in and developed by recognizing patterns of relationships among constructs within and across cases and their underlying logical arguments’ (Eisenhardt & Graebner, 2007, p. 25). The first step was to create a description of the case narratives of each case study (Langley, 1999). Data were classified into tables in order to better comprehend the underlying logics involved. Additionally, 16 case studies from the total of 43 have been identified to support the narrative of the findings in the research. The 16 case studies gave the most detail on a variety of characteristics that were analysed (see Appendix 3). The analysis built different factors that represent a large proportion of the variability of data. These factors have been distinguished into three sorts (see Figure 1). (1) ‘Characterizing factors’ were identified that describe the characteristics of the media cluster. These factors are the largest amount identified per media cluster type and incorporate dynamics and purely descriptive characteristics. (2) Main ‘driving factors’ were
identified out of the characterizing factors. Only one driving factor per media cluster type was elaborated for simplicity. Within the analysis, the assumptions of the authors of the case studies were taken into consideration to find what essentially creates and drives the media cluster. (3) ‘Common factors’ were identified out of the characterizing factors. Common factors are characteristics of media clusters that go beyond certain types. These factors also characterize the media cluster type, but all media cluster types identified have these factors as essentially descriptive. The logic of the common factors as well as the driving and characterizing factors are further elaborated in Part 3.

Figure 1 – The three factors of the analysing framework.

The scope and framework

The first step of researching media clusters is the delineation of what is a media cluster. Within this Deliverable, a very expansive notion is chosen which follows the elaborations of Picard (2008): A media cluster is an agglomeration of media organisations and other media-related entities that group for mutual advantages and ‘produce mediated content, such as motion pictures, television programs/videos, broadcasts, audio recordings, books, newspapers, magazines, games, photography and designs, web sites, and mobile content’. This delineation follows also the approach developed in Deliverable 1.1a and the descriptions of Komorowski and Ranaivoson (forthcoming).

A framework to study the media cluster phenomenon is the second step in researching media clusters. This Deliverable is built on the findings of Deliverable 1.1b and extends the work of Komorowski (2016) who developed a framework that groups media cluster characteristics into seven parameters ‘(7Ps): place, proximity, population, profile, path-dependency, policy and performance’ (see Table 3). The framework is especially suitting for this research as ‘not only empirical observations but also theoretical considerations’ can be placed within it
(Komorowski, 2016). Komorowski (2016) developed the 7 Ps based on insights not only from media cluster research, but also from general industry cluster research, grouping different characteristics that have been analysed and discussed in the literature so far. The strength of the 7P framework is that it describes overarching parameters that are very inclusive and open for interpretation so that research that is built on the framework is able to adjust the parameters to the goals of the research. After each parameter was identified within each case, similarities between the cases’ Ps were identified. When more than three cases had at least three parameters similar, a first grouping into a media cluster type was considered. This process was repeated till every case could be grouped with at least two other cases. This grouping built the novel typology.

Table 3 – The 7 P framework for media cluster analysis (depicted from Komorowski, 2016).

<table>
<thead>
<tr>
<th>Place</th>
<th>…the geographical scale and local conditions influencing the media cluster’s dynamics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity</td>
<td>…the topographical and topological nearness influencing the media cluster’s dynamics.</td>
</tr>
<tr>
<td>Population</td>
<td>…the scale of the cluster in quantity of entities and concentration / relevance for the place linked to the development phase of the cluster.</td>
</tr>
<tr>
<td>Profile</td>
<td>…the type of entities and their functions within a cluster.</td>
</tr>
<tr>
<td>Path-dependency</td>
<td>…the historic ligation, the origins and historically developed patterns influencing the dynamics of the cluster.</td>
</tr>
<tr>
<td>Policy</td>
<td>…the media policy tools from all levels influencing the media cluster’s dynamics.</td>
</tr>
<tr>
<td>Performance</td>
<td>…the endogenous and exogenous externalities that media clusters produce.</td>
</tr>
</tbody>
</table>

The case studies

There have been plenty of studies providing insights into specific place-industry cases for media clusters (e.g. Britton & Legare, 2005; Casper, 2007; Goldsmith & O’Regan, 2003; Krätke, 2002; Scott, 2002). Karlsson & Picard (2011) alone present in Media Clusters: Spatial agglomeration and content capabilities a collection of chapters that focus on media clusters in various cities or regions (11) with sufficient empirical data on each cluster (London, Munich, Manchester, Liverpool, Vancouver, South Africa, Singapore, etc.). Even though there are many case studies available the identification of media cluster case studies is marked by hurdles.

For instance, the authors in this research field come from many different disciplines and therefore use different approaches. This leads to a broad
vocabulary of similar ideas. The authors have talked for instance about the concept of the ‘creative knowledge city’, ‘media hub’ or ‘knowledge-intensive economy’ and therefore not incorporated the wording of ‘media cluster’. However, this research found that all case studies showed the characteristics of a media cluster as delineated above. Approaches used in each case install a pre-defined view of the authors on the cluster. This can make the grouping into a typology biased. Boix et al. (2012) summarize existing approaches in media cluster literature quite comprehensively: the industrial complex approach, the social network approach, the pure agglomeration cluster approach and at other geographical scales, general mapping exercises that rely basically on the use of location quotients. This heterogeneity of approaches in media cluster case studies makes the grouping into typologies a difficult task.

Additionally, a grouping of available case studies in literature is biased as not all kind of areas of media cluster research get in academia the same amount of attention. This can be identified when looking at the geographic distribution of case studies identified. Out of the 43 case studies, 65 % are located in Europe and 25 % in North America. Within Europe, there is also a clear distribution of case studies in certain countries, as most come from the UK (13), Germany (8), Scandinavia (3) and The Netherlands (3). The geographical distribution of case studies can be seen in Figure 2 below. This has different reasons. The countries, in which most case studies have been conducted are also strong political supporters of the media cluster concept. Especially the UK has a long tradition and supports the creation of knowledge in that research field. Also, only case studies in English have been taken into account for this research. Research from countries like France could be available but are not accessible for the researcher. Attention in research has been also given mostly to big metropolitan areas while smaller cities are under-researched. This needs to be taken into account when using the identified case studies. A more balanced geographical distribution of data could lead to different results.

Furthermore, academia has been focused on certain sectors within the media cluster research. Either the authors of case studies have looked at the whole Creative Industry (CI) (14 case studies) or focused on audio-visual (AV) sectors including film and TV (17 case studies). New Media (7 case studies) has also caught some attention as especially the innovativeness of clusters has been researched. Other sectors of the media industry are mostly overlooked, like the newspaper and magazine sector, the advertising sector and others.
Only one case study in print media clusters could be found to enrich the research (see Vang, 2007). Still, the print sector is mentioned often in literature and described as essential. For instance, Bathelt (2002) discusses the origins on Leipzig’s AV cluster by pointing out the importance on book trade, printing and publishing before WW2. The lack in case studies that describe other clusters than AV clusters can lead to a one-sided typology and is visualized in Figure 3.
Otherwise, **the identified case studies show a balanced distribution in other areas.** The methodologies used by the authors vary from empirical studies, interviews and surveys to pure desk research. The oldest case study identified was published in 2001 while on average two additional case studies were published every year (except in 2011, when a collection of 11 case studies in book form was published by Karlsson & Picard). More than half of the cases used were published in journals. Also, book chapters, a book, which included a case study, a thesis and commissioned reports were taken as sources for the case study research. The distribution of methodologies used, the publishing years and sources of case studies is visualized in Figure 4.

Based on the limitation and hurdles described above, **this Deliverable encourages to test the typology and enrich it with further case studies** and observations to overcome issues. Additionally, this Deliverable acknowledges that every media cluster is unique and generalizations should be formulated with care. The limitations will be further elaborated in the concluding remarks.
Figure 4 – Methodologies, publishing years and sources of the identified case studies.

Table 4 – How do we establish a valuable media cluster typology?

- The prolific number of case studies on media clusters, that can be found in literature is utilized. Looking at a collection of case studies shows value as in-depth data is described in them.
- 43 valuable case studies have been identified and analysed in a cross-case comparison to establish a novel typology based on the 7Ps (Deliverable 1.1b).
- It needs to be taken into account that there are limitations as the identified case studies can be biased and not evenly distributed.

It is encouraged to further test the findings and enrich it with additional case studies to overcome these limitations.
Part 3: The findings - a novel typology

The six types of media clusters

This research found six different types of media clusters:

1. The Creative Region
2. The Giant Anchor
3. The Specialized Area
4. The Attracting Enabler
5. The Real-Estate
6. The Pooling Initiative

1. The Creative Region

The Creative Region type is based on the analysis of the cities of Amsterdam (Musterd & Deurloo, 2006), Singapore (Eriksson, 2011) and Berlin (Krätke, 2004). Additionally, Toronto, Los Angeles, Sydney, Cape Town, New York and London support the type (Brinkhoff, 2007; Currid & Williams, 2010; Davis, 2011; Dugmore & Mavhungu, 2011; Gwee, 2009; O’Regan, Goldsmith, & Ward, 2011; Pratt, 2011).

The Creative Region is mainly shaped through its (1) place: A large geographic area where the cluster operates at, usually a metropolitan region and/or a capital region, such as Berlin, Singapore or Amsterdam. The largest concentration of media firms in this type focuses on a central point such as the inner city leading to close (2) geographical proximity between firms. From there, media activities stretch to the periphery of the city. These big metropolitan regions as location of a media cluster provide advantages due to readily available infrastructures and institutions. Particularly important for this media cluster type is the presence of a so-called urban milieu or urban environment. Krätke (2004) describes social and cultural milieus that are ‘branding culture and media products’ and a lifestyle that combines leisure and working time. This milieu also encourages the development of face-to-face interaction and collaboration networks and is especially attractive for talented and well-educated people. The Creative Region shows a big (3) population and can reach 10,000 of media firms and five times as many people working in media. It can be generally assumed that the cluster size scales with the size of the city. Of importance is that the media cluster is not at all specialized in certain activities in its (4) profile. Media activities include not only publishing, advertising, the AV sector and new media, but also ICT, arts and creative activities.
(5) Policies and governmental influence on the Creative Region can play a role, but are not a determining factor. The Creative Region is strongly influenced by (6) historical developments. It often has its roots in industrial locations that shifted towards the service sector as described for Amsterdam. Concerning the (7) performance assessment of the Creative Region, results have been heterogeneous in research. For example, authors found that the high prices for rent in central points of big metropolitan areas have a negative influence on the media clusters.

Even though hindering factors for the growth of the Creative Region type have been found, there is a ‘driving factor’ recognized: urbanization economies. Urbanization economies can be described as local dynamics such as not only sharing of costs and services, access to a variety of infrastructures and economic, social and cultural facilities, but also knowledge spill-over effects and access to a large labour pool. Florida’s (2002) concept of the creative class is a determining factor for the functioning of this media cluster type as well as the idea of an ‘urban milieu’. This media cluster type has been already acknowledged, including Eriksson (2009) who describes his ‘generalized cluster’ type as an urban phenomenon that is influenced by urbanization economies. Additionally, the Creative Region has been also formalized in the literature as, for instance, a ‘global media city’. Krätke and Taylor (2004) describe the idea of global media cities and distinguish hereby between different strategies of where global media firms locate.

2. The Giant Anchor

The Giant Anchor as the second type is built on Hitters’ (2011) analysis on the broadcasting cluster in Hilversum (The Netherlands), Cook & Johns’ (2011) case study on Manchester and Liverpool (UK) and Bathelt & Boogs’ (2003) analysis on Leipzig’s (Germany) media cluster. Furthermore, case studies based on Munich, Cardiff and Cologne back the findings (Harold Bathelt, 2011; Chapain, Cooke, De Propris, MacNeill, & Mateos-Garcia, 2010; Mossig, 2004).

The (1) place of the Giant Anchor is centralized within a focal point, that is, defined by one or more major institutions. In the cases analysed, this focal point was at the location of a public broadcaster. Also, other ‘anchoring’ actors or institutions can play that role. The boundaries of the Giant Anchor from this focal point can be quite indistinct. While Bathelt and Boggs (2003) see the limit of the media cluster case as the city of Leipzig, Cook & Johns (2011) describe the whole North West of England in their study. The areas or cities of the Giant Anchor are mostly medium-sized but have a strategic location (e.g. Hilversum, which is close to Amsterdam). The cases highlight the availability of a large local and specialized labour pool. The concentration (2) of firms in the Giant Anchor is very strong. For instance, the highest concentration of TV companies in The Netherlands can be found in Hilversum. This also leads to a dependent network that is vertically integrated and relies on resources within the cluster. The Giant Anchor can be (3) populated by
several hundred firms (around 500), which employ 10,000 of people. This size of the Giant Anchor is, however, determined by its (4) profile that is dependent on its most important feature, its focal institution. All case studies highlight that there is a limited number of large firms at the core and a lot of small companies that are usually dependent on the commissions from the core. Giant Anchor clusters are highly influenced by (5) politics and (6) path-dependencies. For example, the North West of England is highly influenced by the ‘out-of-London’ obligations that impose the BBC to outsource production. The Giant Anchor type seems very locked-in at their location. For instance, Hilversum became a media cluster because transmission towers were located there, which are in today’s age obsolete. Still, the Giant Anchor can show (7) good performance through many means. Hitters (2011) highlights that the oligopolistic structure leads to competition between suppliers, creating more efficiency. Costs of coordination are reduced and the availability of specialized supply firms and local expertise are highlighted.

In conclusion, the Giant Anchor is driven by the activities of one or several large media institutions, which attract media firms to agglomerate. While the analysis above mostly followed public broadcasters, examples of Giant Anchors that are based on private firms can be found. Barnes and Coe (2011), for instance, describe EA Canada as the focal point of the video game industry in Vancouver. Also, Picard (2008) highlights these dynamics and describes that big media firms are in need of freelancers and small firms through the project-based character of the industry. Markusen (1996) describes his ‘hub and spoke-’ and ‘state-centred district’ that follows a similar logic. The importance of the central large media institution as an anchoring point for the agglomeration of media companies is summarized here under the term ‘localization economies’.

3. The Specialized Area

As third media cluster typology, the Specialized Area was built on Nachum & Keeble’s (Nachum & Keeble, 2003) study on central London (in Soho), Plum & Hassink’s (2014) case of Hamburg’s video game developers (in St. Pauli) and Britton and Legare’s (2005) analysis of new media in Toronto (in Dundas and Font Streets), and is supported by studies on Silicon Valley, Nashville, Sussex and Brighton (Blackburn & Conway, 2008; Casper, 2007; Harper, Cotton, & Benefield, 2013; Perrons, 2004).

A Specialized Area is a media cluster that is (1) located either in a neighbourhood or a district within a big metropolitan area (e.g. St. Pauli in the centre of Hamburg) or in a certain rather small urbanized area (e.g. Silicon Valley). The cluster can ‘stretch’ towards surrounding districts. The urban environment within these districts, like the existence of informal gathering places such as bars, restaurants, clubs and theatres, plays an important role. It can be stressed that the Specialized Area is marked by a readily available, large pool of employees from a specialized field. Infrastructure such as public transport and road access results in good levels
of accessibility. The cases showed that the Specialized Area has the (2) highest concentration of specific media activities within the whole country. London, for example, excels by providing an estimated 70–80% of all media-related employment in the UK, out of which most is to be found in Soho (Nachum & Keeble, 2003). Contributing to this pooling of manpower is the combination of collaborative and competitive relationships and the informal circulation of knowledge, resulting in an overall higher level of expertise. The Specialized Area can be (3) populated by only several 10–100 firms and respectively 10 times as many employees depending on the specialization (e.g. 25 video game firms in St. Pauli, Hamburg, to 550 new media firms in the central area of Toronto). The (4) profile of the Specialized Area shows a strong specialization. Companies are predominantly of small or ‘ultra-small’ scale and a large pool of freelancers is available (but also multinational companies can be integrated). The necessary stakeholder network of support-actors is abundantly in place. The Specialized Area can be influenced by (5) policy mechanisms. Toronto’s new media sector is, for instance, supported by institutions such as AIMS and the New Media Business Alliance. Additionally, the Specialized Area is influenced by path-dependency (6). The cluster firms are often locked-in. Soho, for example, has been identified as a place for ‘bohemians’ since at least the 1920s when major media companies purchased premises there. The unifying factor concerning (7) performance is the focus on specific advantageous aspects of the cluster set-up. The afore-mentioned supporting network of specialized firms and available knowledge and skills makes the cluster successful. These cluster dynamics of the Specialized Area are the driving factor and can be summarized under the term ‘agglomeration economies’. Of strong significance is the agglomeration of specialized activities in a certain ‘smaller’ area. In the literature, the dynamics that occur in these areas have been widely discussed and range from commonly assumed advantages of higher levels of competition, knowledge transfer, mobility of a large labour pool, networks of suppliers or vertical relationships, closeness to clients, to networking. Dicken (2007) describes the ‘specialized cluster’ type benefitting from localization economies and linked production networks. Markusen (1996) describes the ‘Marshallian new industrial district’ that is based on small and medium-sized companies that are independent on inter-firm trade, collaboration and institutional support. These descriptions fit the inherent logic of the Specialized Area media cluster.

4. The Attracting Enabler

The Attracting Enabler as fourth type of a media cluster is based on the analysis of the production cluster in Potsdam (Germany), called Babelsberg Film Studio (Krätke, 2002), the film production cluster in Trollhättan (Sweden) called Film i Väst (Achtenhagen, 2011) and the studio complex in London (UK) called Pinewood Studios Group (Goldsmith & O’Regan, 2003).
The Attracting Enabler is a media cluster type that is in its core determined by the (1) location of certain facilities or resources that can be shared that enable media activities. The case studies identified to build this typology all focus on movie studios. However, the author considers that also other facilities and resources enable this media cluster type, and will further discuss this below. The facilities of movie studios need a lot of space. For example, the Babelsberg movie studio complex incorporates an area of 460,000 m$^2$, while Trollhättan features 1100 m$^2$. On the site of these facilities or close to them, a pool of specialized media workers is established, as well as other institutional support networks and infrastructure facilities can be found (e.g. the Pinewood Studios Group is connected internally and with London through a high-speed intranet connection). The location of the Attracting Enabler can be very heterogeneous. While, for instance, Babelsberg and Pinewood are strategically close to the capitals, Trollhättan is very far from the capital or any other major city. Because of the facilities, there is strong (2) proximity as the firms are either on the same site as the enabling facility located or directly around it. This also leads to significant concentration of media activities (e.g. 20% of the German film industry is located in Babelsberg). Transactional and communication networks are often established. The (3) population of the Attracting Enabler depends on the enabling facilities and can be very varied in size. For example, Trollhättan features only 14 production companies, while more than 2000 different service companies are attributed to the Pinewood Studios Group. The population also depends on the (4) profile of the cluster. The Attracting Enabler can be highly specialized in activities that are enabled by the localized facilities. In the case of movie studio clusters, this means specialization in movie production. Also, other supporting institutions can be included such as schools and public bodies. The range of specialization can, however, vary. For instance, Babelsberg specializes in pre- and postproduction, while the Pinewood Studios Group integrates all kinds of activities related to AV production. The (5) policy-related situation and the (6) historical development are also very inconsistent. Political influence and historical lock-in effects depend on the facilities established. In the case of movie studios, a strong influence of policy mechanisms can be observed. For example, Babelsberg established in 1912 functions through strong connections to regional bodies (HFF, Media Initiative, etc.), as contracts of these bodies have to be allocated to firms in the same region. Regarding the (7) performance, the cluster has unique traits. The facilities are normally necessary to do certain media activities and, therefore, enable the cluster to even perform. However, important aspects that seem to reoccur are the accessibility to necessary support services, access to infrastructures and specific facilities as well as local and super-regional networks.

The Attracting Enabler type incorporates the idea that the driving factor of this cluster is the availability of a facility or other resources that can be shared, which attract the agglomeration of media activities. Within this Deliverable, this dynamic is part of the idea of ‘localization economies’. The benefits and the dynamics
created through an enabling facility and resources seem obvious. Without these, the cluster could not execute its activities. Additional dynamics as observed in the other types can still occur, which makes this cluster no less interesting. Goldsmith and O’Regan (2003) analysed the so-called studio complex, showing that the extent of activities and specialization can be quite heterogeneous. Other facilities and shared resources can be imagined, but have not gotten much attention in the literature. One author who describes this idea is Vang (2007). He argues that the agglomeration of newspapers in the largest metropolitan areas is not due to knowledge externalities, which is typically emphasized, but instead he argues that the spatial organization reflects the need for physical proximity to central powers and major events taking place in these areas. The Attracting Enabler as one of the media cluster types is, therefore, going beyond the existing literature.

5. The Real Estate

The fifth type of media clusters has been named the Real Estate and is built on the analysis of the Dubai Media City by Picard & Barkho (2011) and Hitter’s (2011) analysis of the Media Park in Hilversum in The Netherlands while analysis on Dublin’s Digital Hub and the Chiswick Park in London were also used (Bayliss, 2007; Njo, 2002; Sanders, 2008).

The Real Estate type of a media cluster is determined by its (1) place: provided office space. The office space can range from several working places to a flex office to a building and to several buildings in an area. Therefore, not only so-called industrial purpose buildings are included in this typology, but also smaller initiatives, such as incubators and workshops. While the case studies identified only focus on the building and real estate-driven media clusters, the author claims that the functioning of this kind of media cluster extends further. However, as this area is under-researched, the following elaborations will focus on buildings, but include further considerations of extending the typology. In terms of scale, the Real Estate media cluster can be quite diverse. For instance, the Dubai Media City incorporates 30 buildings with each 33,000 m², while the Media Park in Hilversum consists of one building with 300,000 m². When the Real Estate is not a building, even much smaller scales are possible. The location of the Real Estate can be also quite diverse: within a major city (e.g. London) or even a medium-sized city (e.g. Rotterdam). The Real Estate often offers additional small facilities or services that make this cluster attractive. For instance, the Dubai Media City offers hotels, housing complexes, infrastructures and a free-trade zone. The (2) proximity of the media firms and activities are obvious: they share closely located offices. This leads to a high density of many firms and many people who can network and find necessary skills and activities. The (3) population scales with the available office space and profile. It can rank from only 10 to a couple of 100 firms (200 companies in the Media Park in Hilversum) to more than 1000 firms (1400 firms in the Dubai
Media Clusters Brussels: DELIVERABLE 1.1c
Report on Classifying Media Clusters into a Typology

The (4) profile of the Real Estate depends on its management and can be quite broad to really focused. For example, the Dubai Media City includes companies active in broadcasting, publishing, printing, music, leisure and film, ranging from outlets of major media giants such as CNN and Reuters to individual freelancers. The Media Park in Hilversum, on the other hand, focuses on AV and major core companies such as the public broadcaster PSBS and production company Endemol are located there. The (5) policy influence and (6) path-dependency effects on the Real Estate are determining the dynamics of the cluster type. The Real Estate can be privately but also publicly owned and managed. For instance, the Dubai Media City was created through specific planning of the government and the royal family, and is now owned by Dubai holdings, a private company. The Media Park Master Plan (2020) established by local policy for Hilversum targets the stimulation of networking and spillovers within the Media Park. In the managements of the Real Estate, different services are offered. For example, visa arrangements and travel bookings are included services in the Dubai Media City, and the Media Park in Hilversum is in charge of public safety, a good working environment and more. The (7) performance of the Real Estate is driven most of all by the provision of media-targeted real estate. But other dynamics can influence the performance of the cluster, such as the services and facilities provided. Additionally, it can be observed that the Real Estate is also used as an urban renewal programme by public authorities.

The driving factor of this media cluster is first of all the provision of office space that targets media actors. The difference from the Attracting Enabler type is that the facilities and resources provided are not a requirement for the companies to work. Especially interesting to notice here is that this kind of cluster is the first identified type that is purely artificially formed. While the other types have evolved mostly naturally and through localization, agglomeration or localization economies, the Real Estate is a purpose-built media cluster. This idea is not only still new in the media cluster literature, but also a quite recent phenomenon in regional policies (regarding that 20 years is recent however). Besides the real estate media clusters that already exist such as the Dubai Media City, the Media Park in Hilversum, the MediaPark in Cologne and the Media City in Salford, more media purpose buildings are in development, such as the future Media Park at the site of Reyers in Brussels. The Real Estate type is still an under-researched media cluster. Picard (2008) already described the 'real estate-driven cluster’ with similar characteristics and the ‘planned cluster’ which is promoted by authorities and the ‘managed cluster’.

6. The Pooling Initiative

The sixth and last type is called the Pooling Initiative and is based on Sölvell et al.’s (2003) analysis of the Scottish Enterprise initiative, Parejy-Eastaway et al.’s

This media cluster type is the most distinctive as the Pooling Initiative is not really determined by a (1) place. The place of these clusters is, however, still predefined by a local organization, a so-called cluster initiative. These initiatives can cover, for example, a whole country (e.g. Scottish Enterprise initiative acting in Scotland), a village (e.g. RockCity acting in Hultsfred in Sweden) or a small district or neighbourhood (e.g. @22 acting in a neighbourhood in Barcelona called Poblenou). This has also an influence on the (2) proximity within a cluster. The bigger the area covered, the less proximity can be between firms. Nevertheless, the collaboration and networking within the Pooling Initiative need to be highlighted as the initiatives are most often in charge of enabling this for its members. These members make up the (3) population of the cluster. For instance, the @22Network initiative in Poblenou incorporates 70 representatives and the RockCity initiative in Sweden has 20 SMEs as members. The Pooling Initiative can reach more than several hundred members. The (4) profile of the cluster can be very narrow and very broad depending on the organization. For example, the Scottish Enterprise initiative focuses on all creative industries, while RockCity focuses on micro-firms specializing in music. Very often also other institutions such as universities and public authorities and bodies are involved. The (5) policy mechanisms within the Pooling Initiative are the drivers. The Pooling Initiative is determined by an overarching initiative that can be publicly or privately organized that agglomerates the media activities and manages them to reach a predefined goal that most of the times incorporates the strengthening of the local media industry. This goal is supposed to be reached through different means that include the organization of interaction between firms through, for example, the provision of networking events, the facilitation of education and training, the image-strengthening of its members or direct services. The organization within the Pooling Initiative can be very different. For example, the Scottish Enterprise cluster has a core team of five representatives of local enterprises and four representatives of the government side, while RockCity is essentially an initiative of a musician and his friends. These initiatives are found to be either privately funded by its members or by local or even EU-level mechanisms. Therefore, also the (6) historical development is similar. But what Pooling Initiatives have in common is the organization that intervenes in a localized media sector, leading to a variety of benefits. This is also how this type (7) performs.

This also means that this media cluster type is artificially driven. What is also distinctive about this cluster is that it encompasses very diverse possibilities in its geographical scale and specialization in certain media activities. This also means that this media cluster type cannot be deductively identified. The research on this type needs to start with the initiative itself. The Pooling Initiative is also an artificially formed media cluster that, however, is developed on top of existing
agglomerated media activities. Also, Picard (2008) describes a ‘managed cluster’ type and Gordon and McCann (2000) develop the ‘social network or club model’, focusing on high levels of social integration.

Towards an integrative media cluster typology

Based on the six types described above, this part will focus on bringing them together into an integrative media cluster typology. For this reason, the so-called common factors have been investigated (see Part 2). The case study analysis revealed that there are two common factors that can be used to scale the different typologies: the (1) specialization grade (described in the profile factor) and the (2) geographical scale (described in the proximity and population factor) of the media cluster. However, these common factors do not display a comparable characteristic but revealed a scalable dimension. Through this approach, different kinds of media cluster types are identified on different dimensions (see Figure 5).

Examples of the case studies can illustrate the dimension of the specialization grade. Harper et al. (2013) have described in detail the Nashville music industry. Nashville’s cluster integrates highly focused activities in the music sector. Pratt (2011), in contrast to Nashville, describes how London is hosting many different media sectors from print to AV and new media activities having an expansive focus. Therefore, the type with the most expansive focus in media activities is the Creative Region. The Giant Anchor is the most focused type as the supply service companies are highly specialized in serving the focal institution. The other types, the Specialized Area, the Attracting Enabler and the Real Estate, are somehow focused in their activities, but can also be more expansive (see Figure 5).

Porter (2003, p. 255) explains about clusters: ‘They are present in large and small economies, in rural and urban areas, and at several geographic levels (for example nations, states, metropolitan regions, and cities)’. To illustrate, Picard and Barkho (2011) describe the Dubai Media City as a media cluster, which are buildings and its surroundings in Dubai, while Cook and Johns (2011) focus on the North West of England with Manchester and Liverpool in its centre. This means for the six media cluster types that the Real Estate can be found on the smallest geographical scale, the hyper-local level; the Giant Anchor, Specialized Area and Attracting Enabler can be found on a local level and the Creative Region on the biggest geographical scale, the regional level. The Pooling Initiative is an exception to these dimensions as it can be highly and not at all specialized and can be hyper-local and extend internationally (see Figure 5).
Figure 5 – Media cluster types, their factors and their co-location: the novel typology.

Through the distinction into the geographical scale and specialization grade of the media cluster types, another interesting observation can be visualized. The novel
typology reveals and emphasizes that certain media cluster types can be found in other certain types. Authors such as Mommaas (2004) and Pratt (2011) have found clear evidence of several media clusters co-locating, for instance, in the same cities. But should we see them as separate media clusters that co-locate or do they form an overarching media cluster together? This Deliverable follows both logics at the same time. To illustrate, Hitters (2011) investigated the Dutch broadcasting cluster in Hilversum. He found not only the agglomeration of major broadcasters as described in the Giant Anchor type, but also the presence of a Real Estate at the same site. London can be seen as an example that integrates all kinds of types in one region. Still, each media cluster that is located in London functions as a single media cluster type and at the same time, London and its surroundings function as an integrated media cluster (see arrows in Figure 5).

Additionally, the novel typology reveals that the driving factors of media clusters can be distinguished into four rationales: (1) urbanization economies, (2) agglomeration economies, (3) localization economies and (4) artificial formation. As explained in each type, the dynamics within each rationale can overlap and similar benefits occur for the firms. So, what is the difference between each driving rationale? First of all, in the literature, urbanization, agglomeration and localization economies and their differences and influences on firms are often discussed (Moomaw, 1988). Agglomeration economies is most often used as an overarching term for the other two. However, for the development of the new typology, a clearer distinction is needed. Therefore, this Deliverable reflects, on the one hand, on urbanization economies as such dynamics that occur in urbanized areas, while agglomeration economies only occur when companies agglomerate, which can be also outside an urban environment. On the other hand, localization economies occur when the specific location of a firm enables more productivity, while no need for an agglomeration of several firms is needed and also no urban context. Artificially formed media clusters as the fourth rationale can be formed while neither the context of a city, the actual agglomeration nor the location is needed, but a driving top-down approach establishes the cluster.

**Conclusion and implications**

While the media cluster concept has become not only an appealing approach in the literature but also as policy tool, there are still many fundamental conceptual and theoretical questions not answered yet. One of the most fundamental issues is the comparativeness of the phenomenon. There are essential differences when one talks about a media cluster such as Berlin, Singapore, Manchester, Toronto or London. But in discussions and in research, all these media clusters are lumped together, leading to false assumptions and confusion in debates.
In order to solve this issue, a new typology was developed in this Deliverable. The typology is composed of six different media cluster types (Creative Region, Giant Anchor, Specialized Area, Attracting Enabler, Real Estate and Pooling Initiative), which have specific characteristics:

1. **The Creative Region** is a media cluster that is shaped through urbanization economies. Urban environments lead to advantages like the access to infrastructures and economic, social and cultural facilities, large labour pools and spill-over effects. The Creative Region can be found in big metropolitan areas with more than 10,000 media firms integrated. The Creative Region can be identified because it is mostly characterized as the area within a country that has the highest concentration of media activities that are very broadly focused, integrating not only traditional media outlets but also new media firms, ICT and Telecom sectors. Examples are the media clusters within the metropolitan areas of Berlin, Paris and Los Angeles.

2. **The Giant Anchor** as media cluster type is driven by one or several large private or public institutions as the focal point. This kind of media clusters can be found at strategic locations and also quite often medium-sized cities. The cluster is populated by several hundred media firms that are mostly small and are reliant on contracts with the focal large institution and therefore build a strong service supply network. These clusters are also creating high concentrations of specialized activities and are highly reliant on lock-in effects and policy influences. Examples are the media clusters around the public broadcasters MDR in Leipzig and NOS in Hilversum and the media cluster around Bertelsmann in Gutersloh.

3. **The Specialized Area** type of a media cluster is functioning on the basis of agglomeration economies that produce advantages like high levels of competition, knowledge transfer, mobility of a large labour pool, networks of suppliers and relationships (which are not reliant on an urban environment but on the agglomeration of specialized activities). The Specialized Area can be found in neighbourhoods and districts of metropolitan cities or small urbanized areas. The Specialized Area is characterized by a high specialization grade of media activities into a certain sector and can integrate 10-1000 media firms that are mostly small- or medium-sized. A high concentration of the media cluster can be presumed in the specialized activities which lead to the pooling of skills, knowledge and networks. Examples are the TV and movie production cluster in Soho, London, the new media cluster in the Dundas and Font Streets in Toronto and the music production cluster in Nashville.

4. **The Attracting Enabler** as one of the media cluster types is performing based on available facilities and large scale resources that can be shared. Depending on the facilities and resources, this leads to very heterogeneous locations and size of population. It can still be assumed, that the population is between ten to a couple of thousands media actors. When the facilities
need a lot of space like movie studios, more rural areas are the location. The proximity to a facility or shared resources leads to accessibility of support services, infrastructures and networks within this cluster type. Examples are the media clusters around movie studio facilities like the Pinewood Studios Group in London and the Babelsberg movie studios in Potsdam and media clusters around political bodies, like the journalist clusters in proximity to the European Institutions in Brussels.

5. The Real Estate media cluster type is driven by an office space that is provided by private or public initiatives aiming to agglomerate media activities. The cluster can stretch over just a small office space to a complex of buildings provided, in which respectively ten to a couple of thousands of media firms can have their offices. The Real Estate often enables accessibility to certain services, facilities and networks. Policy mechanisms and direct management of the facilities have a major impact on the clusters. Examples of this media cluster type stretch from small workshops to incubators to business parks like the Dubai Media City, the Media Park in Hilversum and the Digital Hub in Dublin.

6. The Pooling Initiative is a media cluster that is characterized through the existence of a public and private initiative that is managing the media cluster members in one way or another. These kind of clusters can be found on all kind of geographical levels and can be very specialized in certain media activities or very broad including the whole creative industry and beyond. The main goals and benefits of these initiative are the accessibility to networking, collaboration and services. The number of firms or members within these clusters can rank from ten to a couple hundred. The cluster is especially influenced by policy, funding mechanisms and direct management of people working for the initiative or around it. Examples of this kind of media cluster are 22@ initiative in Barcelona, the RockCity initiative in Hultsfred and the Scottish Enterprise initiative.

Together, the six media cluster types can co-locate and are often intertwined, while they are driven by urbanization, agglomeration and localization economies or they are artificially formed (see Figure 2). Taking all these considerations into account, a novel typology was formed that enables researchers and practitioners to look beyond the distinction of media clusters by, for instance, sectors and shift the focus towards the differences and similarities. The typology paves the way for future research in the field and a more valuable policy debate around media clusters:

(1) There is a wide range of literature on identifying clusters and methods have been developed that rely on measures of critical mass and the use of concentration indexes such as location quotients, Gini indexes, the Ellison Glaeser measures and the Nearest-Neighbour search (Boix et al., 2012). These methods are only capable to locate and identify high concentrations
of activities. Using the novel typology enables researchers to identify clusters based on more clear measures that are, for example, much smaller in scale and rely on other characteristics than localized concentrations.

(2) The case study is the most commonly used method in media cluster research. But it has been often criticized that findings and results of case studies are not generalizable. The media cluster typology streamlines media cluster research and makes results generalizable in the context of each type. The media cluster typology can also guide policy-makers in this matter through enabling them to find similar media clusters they address to benchmark and use as examples.

(3) There is considerable confusion in political and academic debates when media clusters are discussed. The wording is very open and while some people think of a media cluster like a hot-spot within a city, others think about a whole region. The novel typology untangles this confusion and separates different media clusters into different groups that are named differently, supporting future debates on the matter.

Still, there are limitations of the novel typology and they need to be kept in mind when the typology is applied in research and political debates (see Part 2). The Deliverable tried to overcome these issues by taking considerations into account that go beyond the analysed case studies and tried to be as open as possible for extensions of the argumentations made in each type. This way the novel typology ensures to create value for future research in the field. Additionally, this Deliverable encourages to test the typology and enrich it with further case studies and observations.

Table 5 – What are the results and how can future research benefit?

<table>
<thead>
<tr>
<th>The media cluster typology is made up of six media cluster types that can co-locate and be part of each other at the same time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. The Creative Region</td>
</tr>
<tr>
<td>8. The Giant Anchor</td>
</tr>
<tr>
<td>9. The Specialized Area</td>
</tr>
<tr>
<td>10. The Attracting Enabler</td>
</tr>
<tr>
<td>11. The Real Estate</td>
</tr>
<tr>
<td>12. The Pooling Initiative</td>
</tr>
</tbody>
</table>

The six types can be differentiated by their geographical scale and specialization grade and can co-locate. The novel typology enables media cluster researchers and politicians to create more accurate identification methods, to make case studies more generalizable, to benchmark media clusters in more detail, to identify more suitable approaches for media cluster analysis from case to case, to untangle confusion in debates and to decide on suitable action points in policy.
Appendix 1: References


Komorowski, M., & Ranaivoson, H. (forthcoming). To be or not to be the media industry – A practical approach to a fuzzy concept. *Journal of Media Business Studies*.


http://www.andycpratt.info/andy_c_pratt/Research_Writing__Downloads_files/media%20clusters.pdf


Appendix 2: Case studies analysed (43)

<table>
<thead>
<tr>
<th>Author(s) (alphabetically)</th>
<th>Year</th>
<th>Title</th>
<th>City, country studies</th>
<th>Sectors included</th>
<th>Method of author(s)</th>
<th>Origin</th>
<th>Identified typology included (column 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achtenhagen</td>
<td>2011</td>
<td>Creating a Film Production Cluster in Sweden's West: The Cast of 'Trollywood'</td>
<td>Trollhättan, Sweden</td>
<td>Film</td>
<td>Desk research</td>
<td>Book chapter</td>
<td>4 ✓</td>
</tr>
<tr>
<td>Barnes &amp; Coe</td>
<td>2011</td>
<td>Vancouver as Media Cluster: The Cases of Video Games and Film/TV</td>
<td>Vancouver, Canada</td>
<td>Video Games</td>
<td>Interviews (55)</td>
<td>Book chapter</td>
<td>2, 3</td>
</tr>
<tr>
<td>Bathelt</td>
<td>2011</td>
<td>Munich’s Media Cluster at the Crossroads</td>
<td>Munich, Germany</td>
<td>AV</td>
<td>Interviews</td>
<td>Book chapter</td>
<td>2</td>
</tr>
<tr>
<td>Bathelt &amp; Boggs</td>
<td>2003</td>
<td>Toward a Reconceptualization of Regional Development Paths: Is Leipzig’s Media Cluster a Continuation of or a Rupture with the Past?</td>
<td>Leipzig, Germany</td>
<td>AV</td>
<td>Desk research</td>
<td>Journal paper</td>
<td>2 ✓</td>
</tr>
<tr>
<td>Blackburn &amp; Conway</td>
<td>2008</td>
<td>Clusters in the new media industry: relevant model or artifact?</td>
<td>Sussex, UK</td>
<td>New Media</td>
<td>Interviews</td>
<td>Book chapter</td>
<td></td>
</tr>
<tr>
<td>Britton &amp; Legare</td>
<td>2005</td>
<td>Clustering and the digital economy: New media in Toronto</td>
<td>Toronto, Canada</td>
<td>New Media</td>
<td>Interviews</td>
<td>Journal paper</td>
<td>3 ✓</td>
</tr>
<tr>
<td>Chapain et al.</td>
<td>2010</td>
<td>Creative clusters and innovation (pp.29-41 Cardiff Media Production)</td>
<td>Cardiff, UK</td>
<td>TV</td>
<td>Survey</td>
<td>Commissioned report</td>
<td>2</td>
</tr>
<tr>
<td>Chapain et al.</td>
<td>2010</td>
<td>Creative clusters and innovation (pp.29-41 Manchester Advertising Cluster)</td>
<td>Manchester, UK</td>
<td>Advertising</td>
<td>Survey</td>
<td>Commissioned report</td>
<td>3</td>
</tr>
<tr>
<td>Cook &amp; Johns</td>
<td>2011</td>
<td>The Transformation of Broadcasting and Film in Manchester and Liverpool</td>
<td>Manchester, Liverpool, UK</td>
<td>AV</td>
<td>Interviews (40)</td>
<td>Book chapter</td>
<td>2 ✓</td>
</tr>
<tr>
<td>Currid &amp; Williams</td>
<td>2010</td>
<td>Two Cities, Five Industries: Similarities and Differences Within and Between Cultural Industries in New York and Los Angeles</td>
<td>NYC &amp; LA, US</td>
<td>CI</td>
<td>Empirical study</td>
<td>Journal paper</td>
<td>1, 2</td>
</tr>
<tr>
<td>Davis</td>
<td>2011</td>
<td>The Toronto Media Cluster: Between Culture and Commerce</td>
<td>Toronto, Canada</td>
<td>CI</td>
<td>Desk research</td>
<td>Book chapter</td>
<td>1</td>
</tr>
<tr>
<td>Davis et al.</td>
<td>2009</td>
<td>Applying an innovation cluster framework to a creative industry: The case of screen-based media in Ontario</td>
<td>Ontario, Canada</td>
<td>AV</td>
<td>Interviews (200)</td>
<td>Journal paper</td>
<td>1</td>
</tr>
<tr>
<td>Dugmore &amp; Mavhungu</td>
<td>2011</td>
<td>Media Industry Clustering in South Africa: Prospects for Economic Development and Spatial Reconfiguration</td>
<td>Johannesburg &amp; Cape Town, South Africa</td>
<td>CI</td>
<td>Desk research</td>
<td>Book chapter</td>
<td>1, 2</td>
</tr>
<tr>
<td>Eriksson</td>
<td>2011</td>
<td>Can Singapore Develop into a Global Media City?</td>
<td>Singapore, Singapore</td>
<td>CI</td>
<td>Desk research</td>
<td>Book chapter</td>
<td>1 ✓</td>
</tr>
<tr>
<td>Goldsmith &amp; O'Regan</td>
<td>2003</td>
<td>Cinema cities, media cities: the contemporary international studio complex (pp.57-59)</td>
<td>London, UK</td>
<td>AV</td>
<td>Desk research</td>
<td>Commissioned report</td>
<td>4 ✓</td>
</tr>
<tr>
<td>Gwee</td>
<td>2009</td>
<td>Innovation and the creative industries cluster: A case study of Singapore’s creative industries</td>
<td>Singapore, Singapore</td>
<td>CI</td>
<td>Desk research</td>
<td>Journal paper</td>
<td>1</td>
</tr>
<tr>
<td>Hitters</td>
<td>2011</td>
<td>Back to Hilversum: Consolidation of the Dutch Broadcast Cluster</td>
<td>Hilversum, Netherlands</td>
<td>TV</td>
<td>Desk research</td>
<td>Book chapter</td>
<td>2, 5 ✓</td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Year</td>
<td>Title</td>
<td>City, Country</td>
<td>Industry</td>
<td>Method</td>
<td>Type</td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>------</td>
<td>-------</td>
<td>--------------</td>
<td>---------</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>21</td>
<td>Kaiser &amp; Liecke</td>
<td>2007</td>
<td>The Munich Feature Film Cluster: The Degree of Global Integration and Explanations for its Relative Success</td>
<td>Munich, Germany</td>
<td>Film</td>
<td>n.a.</td>
<td>Journal paper</td>
</tr>
<tr>
<td>22</td>
<td>Krätke</td>
<td>2004</td>
<td>City of Talents? Berlin's regional economy, socio-spatial fabric and 'worst practice' urban governance</td>
<td>Berlin, Germany</td>
<td>CI</td>
<td>Empirical study</td>
<td>Journal paper</td>
</tr>
<tr>
<td>23</td>
<td>Krätke</td>
<td>2002</td>
<td>Network Analysis of Production Clusters: The Potsdam/Babelsberg Film Industry as an Example</td>
<td>Potsdam, Germany</td>
<td>Film</td>
<td>Survey (42)</td>
<td>Journal paper</td>
</tr>
<tr>
<td>24</td>
<td>Laut, Klofsten &amp; Bienkowski</td>
<td>2012</td>
<td>Catching regional development dreams: a study of cluster initiatives as intermediaries (RockCity case)</td>
<td>Hultsfred, Sweden</td>
<td>Music</td>
<td>Interviews</td>
<td>Journal paper</td>
</tr>
<tr>
<td>25</td>
<td>Lyman &amp; Roberts</td>
<td>2010</td>
<td>Ontario's entertainment &amp; creative cluster a framework for growth</td>
<td>Ontario, Canada</td>
<td>CI</td>
<td>Desk research</td>
<td>Commissioned report</td>
</tr>
<tr>
<td>26</td>
<td>Mossig</td>
<td>2004</td>
<td>The networks producing television programmes in the Cologne media cluster: new firm foundation, flexible specialization and efficient decision-making structures</td>
<td>Cologne, Germany</td>
<td>TV</td>
<td>Empirical study</td>
<td>Journal paper</td>
</tr>
<tr>
<td>27</td>
<td>Mustend &amp; Deurloo</td>
<td>2006</td>
<td>Amsterdam and the Preconditions for a Creative Knowledge City</td>
<td>Amsterdam, Netherlands</td>
<td>CI</td>
<td>Desk research</td>
<td>Journal paper</td>
</tr>
<tr>
<td>29</td>
<td>Njo</td>
<td>2002</td>
<td>Mediaport Rotterdam</td>
<td>Rotterdam, Netherlands</td>
<td>CI</td>
<td>Desk research</td>
<td>Commissioned report</td>
</tr>
<tr>
<td>30</td>
<td>O'Regan, Goldsmith &amp; Ward</td>
<td>2011</td>
<td>Sydney’s Media Cluster: Continuity and Change in Film and Television</td>
<td>Sydney, Australia</td>
<td>AV</td>
<td>Desk research</td>
<td>Book chapter</td>
</tr>
<tr>
<td>31</td>
<td>Oakley, Kipling &amp; Wildgust</td>
<td>2011</td>
<td>Clustering Among Firms in the Non-Broadcast Visual Communications (NBVC) Sector</td>
<td>South East England, UK</td>
<td>AV</td>
<td>n.a.</td>
<td>Journal paper</td>
</tr>
<tr>
<td>32</td>
<td>Parey-Eastaway &amp; Pradel</td>
<td>2010</td>
<td>New economy, new governance approaches? Fostering creativity and knowledge in the Barcelona Metropolitan Region (22@ case)</td>
<td>Barcelona, Spain</td>
<td>CI</td>
<td>Interviews</td>
<td>Journal paper</td>
</tr>
<tr>
<td>34</td>
<td>Picard &amp; Barkho</td>
<td>2011</td>
<td>Dubai Media City: Creating Benefits from Foreign Media Developments</td>
<td>Dubai, Emirates</td>
<td>CI</td>
<td>Interviews</td>
<td>Book chapter</td>
</tr>
<tr>
<td>35</td>
<td>Plum &amp; Hassink</td>
<td>2014</td>
<td>Knowledge bases, innovativeness and competitiveness in creative industries: the case of Hamburg's video game developers</td>
<td>Hamburg, Germany</td>
<td>Video Games</td>
<td>Interviews (20)</td>
<td>Journal paper</td>
</tr>
<tr>
<td>37</td>
<td>Pratt</td>
<td>2011</td>
<td>Microclustering of the media industries in London</td>
<td>London, UK</td>
<td>CI</td>
<td>Empirical study</td>
<td>Book chapter</td>
</tr>
<tr>
<td>40</td>
<td>Sjöholm &amp; Staber</td>
<td>2002</td>
<td>The Institutional Embeddedness of Project Networks: The Case of Content Production in German Television</td>
<td>Cologne &amp; Berlin, Germany</td>
<td>TV</td>
<td>n.a.</td>
<td>Journal paper</td>
</tr>
<tr>
<td>41</td>
<td>Turok</td>
<td>2003</td>
<td>Cities, clusters and creative industries: the case of film and television in Scotland</td>
<td>Scotland, UK</td>
<td>AV</td>
<td>Desk research</td>
<td>Journal paper</td>
</tr>
<tr>
<td>42</td>
<td>Vang</td>
<td>2007</td>
<td>The spatial organization of the news industry: Questioning assumptions about knowledge externalities for clustering of creative industries</td>
<td>Denmark</td>
<td>Print</td>
<td>Interviews (25)</td>
<td>Journal paper</td>
</tr>
</tbody>
</table>
### Appendix 3: Case studies analysed per typology (16)

<table>
<thead>
<tr>
<th>Typology 1: The Creative Region</th>
<th>Mustert &amp; Deurloo (2003) - Amsterdam, Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical scale:</td>
<td>Amsterdam metropolitan area</td>
</tr>
<tr>
<td>- Starting from central point</td>
<td>- Amsterdam as ‘economic island’</td>
</tr>
<tr>
<td>- Towards junction areas</td>
<td>- Strong concentration in three neighbourhoods</td>
</tr>
<tr>
<td>- Local conditions:</td>
<td>- City Centre, Oud-West, Oud-Zuid, together</td>
</tr>
<tr>
<td>- Strong infrastructures</td>
<td>&lt; 10 % of Amsterdam)</td>
</tr>
<tr>
<td>- Urban residential milieu</td>
<td>- 12.7 % of the Dutch workforce is employed in</td>
</tr>
<tr>
<td>- Social climate</td>
<td>Amsterdam in ‘cultural industries’</td>
</tr>
<tr>
<td>- High percentage of highly</td>
<td>- Topological: - Face-to-face contact between</td>
</tr>
<tr>
<td>educated people and artists</td>
<td>producers and consumers</td>
</tr>
<tr>
<td>Topographical:</td>
<td>- 40,000 people working in ICT in the city</td>
</tr>
<tr>
<td>- Close proximity</td>
<td>- 12,000 full-time employees in media and</td>
</tr>
<tr>
<td>- Strong concentration in three</td>
<td>entertainment sector in Amsterdam</td>
</tr>
<tr>
<td>neighbourhoods</td>
<td>- All kind of media activities (publishing,</td>
</tr>
<tr>
<td>(City Centre, Oud-West, Oud-Z</td>
<td>advertising, radio, TV production, news agencies,</td>
</tr>
<tr>
<td>zuid, together &lt; 10 % of</td>
<td>the arts sector, and film and video production,</td>
</tr>
<tr>
<td>Amsterdam)</td>
<td>etc.)</td>
</tr>
<tr>
<td>- Mostly small businesses</td>
<td>- Golden Age, root of Amsterdam’s economic</td>
</tr>
<tr>
<td>Policy</td>
<td>structure</td>
</tr>
<tr>
<td>- Focus on the historically</td>
<td>- Focus on Singapore’s advantages:</td>
</tr>
<tr>
<td>determined track of Amsterdam:</td>
<td>- - stable legal and political</td>
</tr>
<tr>
<td>- Advantages like the physical,</td>
<td>- - social environment</td>
</tr>
<tr>
<td>social and cultural</td>
<td>- - public services</td>
</tr>
<tr>
<td>characteristics</td>
<td>- - finance and infrastructure</td>
</tr>
<tr>
<td>- But: Poorly functioning</td>
<td>- - well-educated workforce</td>
</tr>
<tr>
<td>housing market troubles</td>
<td>- - media cluster has been planned and steered</td>
</tr>
<tr>
<td>Path-dependency</td>
<td>- But: limited political freedom and freedom of</td>
</tr>
<tr>
<td>- Singapore started to</td>
<td>speech</td>
</tr>
<tr>
<td>modernize its economy</td>
<td>- Focus on Singapore’s advantages:</td>
</tr>
<tr>
<td>focusing on creative sectors</td>
<td>- - stable legal and political</td>
</tr>
<tr>
<td>Performance</td>
<td>- - social environment</td>
</tr>
<tr>
<td>- Government plans to develop</td>
<td>- - public services</td>
</tr>
<tr>
<td>a global media hub</td>
<td>- - finance and infrastructure</td>
</tr>
<tr>
<td>- Focus on factors of growth</td>
<td>- - well-educated workforce</td>
</tr>
<tr>
<td>(broadband networks, tech)</td>
<td>- - media cluster has been planned and steered</td>
</tr>
<tr>
<td>- Media Development Authority</td>
<td>- But: limited political freedom and freedom of</td>
</tr>
<tr>
<td>(formed 2003) is in charge</td>
<td>speech</td>
</tr>
<tr>
<td>to promote the media industry</td>
<td></td>
</tr>
<tr>
<td>- Business-friendly policies,</td>
<td>- Focus on Berlin’s urban characteristics and</td>
</tr>
<tr>
<td>usage of “social engineering”</td>
<td>leading role in media</td>
</tr>
<tr>
<td>- Create spillovers</td>
<td>- But: Governmental tech focus</td>
</tr>
<tr>
<td>- All kind of media activities</td>
<td>- hinders growth in media, lack of</td>
</tr>
<tr>
<td>(knowledge-based economy,</td>
<td>- corporate headquarters /</td>
</tr>
<tr>
<td>creative media, ‘classic’</td>
<td>industrial capacities /</td>
</tr>
<tr>
<td>media sector - radio, TV,</td>
<td>entrepreneurial control</td>
</tr>
<tr>
<td>publishing, many book</td>
<td>capacity, severe cuts in expenditure and</td>
</tr>
<tr>
<td>publishers)</td>
<td>public services</td>
</tr>
<tr>
<td>- 12.5 billion EUR (19 billion</td>
<td>- Like schools, universities and medical centres</td>
</tr>
<tr>
<td>S$) revenues</td>
<td></td>
</tr>
<tr>
<td>- 59,000 people employed in</td>
<td></td>
</tr>
<tr>
<td>media industry</td>
<td></td>
</tr>
<tr>
<td>- Topographical:</td>
<td></td>
</tr>
<tr>
<td>- 1.56 % of Singapore’s GDP</td>
<td></td>
</tr>
<tr>
<td>in local media industry</td>
<td></td>
</tr>
<tr>
<td>- Topological:</td>
<td></td>
</tr>
<tr>
<td>- n.a.</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td></td>
</tr>
<tr>
<td>- 40,000 people working in ICT</td>
<td></td>
</tr>
<tr>
<td>- 12,000 full-time employees</td>
<td></td>
</tr>
<tr>
<td>- 12,000 full-time employees</td>
<td></td>
</tr>
<tr>
<td>- 40,000 people working in ICT</td>
<td></td>
</tr>
<tr>
<td>- 12,000 full-time employees</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td></td>
</tr>
<tr>
<td>- Amsterdam metropolitan area</td>
<td></td>
</tr>
<tr>
<td>- Singapore metropolitan area</td>
<td></td>
</tr>
<tr>
<td>- Big metropolitan urban region</td>
<td></td>
</tr>
<tr>
<td>- 4.2 million inhabitants)</td>
<td></td>
</tr>
<tr>
<td>- Preference of inner city</td>
<td></td>
</tr>
<tr>
<td>- Local conditions:</td>
<td></td>
</tr>
<tr>
<td>- Internationalized city</td>
<td></td>
</tr>
<tr>
<td>- Unoccupied office space</td>
<td></td>
</tr>
<tr>
<td>- Berlin as ‘economic island’</td>
<td></td>
</tr>
<tr>
<td>- Urban environment for a</td>
<td></td>
</tr>
<tr>
<td>particular lifestyle</td>
<td></td>
</tr>
<tr>
<td>- Concentration of talented</td>
<td></td>
</tr>
<tr>
<td>people in science and media</td>
<td></td>
</tr>
<tr>
<td>- Strong clustering tendencies</td>
<td></td>
</tr>
<tr>
<td>in East-Berlin’s city centre</td>
<td></td>
</tr>
<tr>
<td>- around Chaussee Straße</td>
<td></td>
</tr>
<tr>
<td>- extending to Prenzlauer Berg</td>
<td></td>
</tr>
<tr>
<td>- Communication links between</td>
<td></td>
</tr>
<tr>
<td>firms</td>
<td></td>
</tr>
<tr>
<td>- Creating of ‘space of</td>
<td></td>
</tr>
<tr>
<td>opportunities’</td>
<td></td>
</tr>
<tr>
<td>- 1700 specialized firms in</td>
<td></td>
</tr>
<tr>
<td>the software industry</td>
<td></td>
</tr>
<tr>
<td>- 7000 firms cluster in Berlin’s</td>
<td></td>
</tr>
<tr>
<td>media industry</td>
<td></td>
</tr>
<tr>
<td>- Culture &amp; media industries</td>
<td></td>
</tr>
<tr>
<td>- Film production, television,</td>
<td></td>
</tr>
<tr>
<td>radio, new media, music,</td>
<td></td>
</tr>
<tr>
<td>publishing, design agencies,</td>
<td></td>
</tr>
<tr>
<td>advertising)</td>
<td></td>
</tr>
<tr>
<td>- Also: Software industry,</td>
<td></td>
</tr>
<tr>
<td>biotechnology</td>
<td></td>
</tr>
<tr>
<td>- Regional economic</td>
<td></td>
</tr>
<tr>
<td>development policy focuses</td>
<td></td>
</tr>
<tr>
<td>on technology</td>
<td></td>
</tr>
<tr>
<td>- Severe budget cuts because</td>
<td></td>
</tr>
<tr>
<td>of Berlin’s financial</td>
<td></td>
</tr>
<tr>
<td>situation</td>
<td></td>
</tr>
<tr>
<td>- 1990s, Berlin declined as</td>
<td></td>
</tr>
<tr>
<td>industrial location massively</td>
<td></td>
</tr>
<tr>
<td>while the economy developed</td>
<td></td>
</tr>
<tr>
<td>slowly towards a ‘service</td>
<td></td>
</tr>
<tr>
<td>metropolis’</td>
<td></td>
</tr>
<tr>
<td>- Last 10 years, considerable</td>
<td></td>
</tr>
<tr>
<td>growth in importance for</td>
<td></td>
</tr>
<tr>
<td>- Focus on Berlin’s urban</td>
<td></td>
</tr>
<tr>
<td>characteristics and leading</td>
<td></td>
</tr>
<tr>
<td>role in media</td>
<td></td>
</tr>
<tr>
<td>- But: Governmental tech focus</td>
<td></td>
</tr>
<tr>
<td>hinders growth in media,</td>
<td></td>
</tr>
<tr>
<td>lack of corporate headquarters /</td>
<td></td>
</tr>
<tr>
<td>industrial capacities /</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial control</td>
<td></td>
</tr>
<tr>
<td>capacity, severe cuts in</td>
<td></td>
</tr>
<tr>
<td>expenditure and public</td>
<td></td>
</tr>
<tr>
<td>services like schools,</td>
<td></td>
</tr>
<tr>
<td>universities and medical</td>
<td></td>
</tr>
<tr>
<td>centres</td>
<td></td>
</tr>
</tbody>
</table>
### Media Clusters Brussels: DELIVERABLE 1.1c

**Report on Classifying Media Clusters into a Typology**

#### Typology 2: The Giant Anchor

<table>
<thead>
<tr>
<th>Hitters (2011) - Hilversum, Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geographical scale:</strong></td>
</tr>
<tr>
<td>Focal point of the cluster is the Media Park where the Dutch public broadcaster is located</td>
</tr>
<tr>
<td>Throughout the city more companies are located and scattered into the suburban area</td>
</tr>
<tr>
<td>Local conditions:</td>
</tr>
<tr>
<td>Medium-sized town (84,000 inhabitants)</td>
</tr>
<tr>
<td>Media Park has numerous studios and studio facilities</td>
</tr>
<tr>
<td><strong>Topographical:</strong></td>
</tr>
<tr>
<td>Highest concentration of TV companies in Hilversum in whole NL</td>
</tr>
<tr>
<td>25% of turnover in Hilversum comes from ICT and creative industries</td>
</tr>
<tr>
<td>1/3 of employment in Hilversum (in)directly in AV</td>
</tr>
<tr>
<td>Topological:</td>
</tr>
<tr>
<td>Vertically integrated - 'Reproductive' network</td>
</tr>
<tr>
<td>Strongly embedded structure</td>
</tr>
<tr>
<td>Peripheral firms dependent on commissions from the core firms</td>
</tr>
<tr>
<td><strong>Local conditions:</strong></td>
</tr>
<tr>
<td>519 media and entertainment companies in Hilversum</td>
</tr>
<tr>
<td>10,000 people employed by them and additional 4000 in ICT and CI</td>
</tr>
<tr>
<td><strong>Planning cluster that originated in a concentration of broadcasting facilities:</strong></td>
</tr>
<tr>
<td>Government intervention (municipal and state level) to support cluster:</td>
</tr>
<tr>
<td>Improving traffic flow, accessibility, fibre optic infrastructure</td>
</tr>
<tr>
<td>Subsidizing of networking events / educational activities</td>
</tr>
<tr>
<td>Cooperation structure</td>
</tr>
<tr>
<td>Knowledge transfer networks</td>
</tr>
<tr>
<td>Network organizations (e.g. Sticking Multi Media Hilversum) and Media Park</td>
</tr>
<tr>
<td>Planned cluster that originated in a concentration of broadcasting facilities</td>
</tr>
<tr>
<td>Government intervention (municipal and state level) to support cluster:</td>
</tr>
<tr>
<td>Improving traffic flow, accessibility, fibre optic infrastructure</td>
</tr>
<tr>
<td>Subsidizing of networking events / educational activities</td>
</tr>
<tr>
<td>Cooperation structure</td>
</tr>
<tr>
<td>Knowledge transfer networks</td>
</tr>
<tr>
<td>Network organizations (e.g. Sticking Multi Media Hilversum) and Media Park</td>
</tr>
<tr>
<td>Slow and gradual development along the advent of radio and TV</td>
</tr>
<tr>
<td>Dates back to 1923 when radio manufacturer started transmissions</td>
</tr>
<tr>
<td>Building of transmission tower was reason to locate there (now obsolete with cable and digital development)</td>
</tr>
<tr>
<td>Decline after 2008 when TV companies (MTV) and radio (Q-Music) relocated to Amsterdam</td>
</tr>
<tr>
<td>Focus on main engines:</td>
</tr>
<tr>
<td>Large broadcasting organizations and facilities companies leading to:</td>
</tr>
<tr>
<td>Oligopolistic structure with competition of suppliers / efficiency / reduced costs</td>
</tr>
<tr>
<td>Spillover effects</td>
</tr>
<tr>
<td>Above average growth of employment in creative sector</td>
</tr>
<tr>
<td>But: appeal of Hilversum is shrinking due to competition from Amsterdam</td>
</tr>
<tr>
<td>Focus on location of independent producers and major broadcasters (BBC, ITV) highly influencing the cluster:</td>
</tr>
<tr>
<td>Average company has good performance (financially)</td>
</tr>
<tr>
<td>Reliant on policy development</td>
</tr>
<tr>
<td>Focus on location of independent producers and major broadcasters (BBC, ITV) highly influencing the cluster:</td>
</tr>
<tr>
<td>Average company has good performance (financially)</td>
</tr>
<tr>
<td>Reliant on policy development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cook &amp; Johns (2011) - Manchester to Liverpool, UK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geographical scale:</strong></td>
</tr>
<tr>
<td>Large concentration at centre of Manchester in vicinity of ITV and BBC</td>
</tr>
<tr>
<td>North West of England (majority in Manchester extending to other cities like Liverpool)</td>
</tr>
<tr>
<td>Distinct boundaries</td>
</tr>
<tr>
<td>Local conditions:</td>
</tr>
<tr>
<td>Availability of shared resources - mobile labour pool</td>
</tr>
<tr>
<td>Strong reputation for quality content</td>
</tr>
<tr>
<td>Niche market specialization</td>
</tr>
<tr>
<td><strong>Topographical:</strong></td>
</tr>
<tr>
<td>Second largest level of broadcasting activity in UK (after London)</td>
</tr>
<tr>
<td>1/3 of total workforce in media of UK in NW</td>
</tr>
<tr>
<td>Topological:</td>
</tr>
<tr>
<td>Cluster exposes extra-local connections to other markets</td>
</tr>
<tr>
<td>Strong dependencies (e.g. Liverpool dependent on resources in Manchester while dependent on London)</td>
</tr>
<tr>
<td>(In)formal networks creating buzz (although declining)</td>
</tr>
<tr>
<td><strong>Local conditions:</strong></td>
</tr>
<tr>
<td>170,000 people employed and freelance (50/50) in media in North West</td>
</tr>
<tr>
<td>513 companies in film and television</td>
</tr>
<tr>
<td>19.8 billion EUR (15.8 billion GBP) Gross Value Added of creative cluster in NW</td>
</tr>
<tr>
<td><strong>Planning cluster that originated in a concentration of broadcasting facilities:</strong></td>
</tr>
<tr>
<td>Government intervention (municipal and state level) to support cluster:</td>
</tr>
<tr>
<td>Improving traffic flow, accessibility, fibre optic infrastructure</td>
</tr>
<tr>
<td>Subsidizing of networking events / educational activities</td>
</tr>
<tr>
<td>Cooperation structure</td>
</tr>
<tr>
<td>Knowledge transfer networks</td>
</tr>
<tr>
<td>Network organizations (e.g. Sticking Multi Media Hilversum) and Media Park</td>
</tr>
<tr>
<td>Slow and gradual development along the advent of radio and TV</td>
</tr>
<tr>
<td>Dates back to 1923 when radio manufacturer started transmissions</td>
</tr>
<tr>
<td>Building of transmission tower was reason to locate there (now obsolete with cable and digital development)</td>
</tr>
<tr>
<td>Decline after 2008 when TV companies (MTV) and radio (Q-Music) relocated to Amsterdam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Buchelt &amp; Boogs (2003) - Leipzig, Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geographical scale:</strong></td>
</tr>
<tr>
<td>High concentration at city's southern edge centralized at MDR public broadcaster</td>
</tr>
<tr>
<td>Spreading in whole city</td>
</tr>
<tr>
<td>Local conditions:</td>
</tr>
<tr>
<td>Largest city in Saxony</td>
</tr>
<tr>
<td>Localized capabilities like institutional structures, regional customers, local identity</td>
</tr>
<tr>
<td><strong>Topographical:</strong></td>
</tr>
<tr>
<td>n.a.</td>
</tr>
<tr>
<td>Topological:</td>
</tr>
<tr>
<td>Local labour market relations, networks</td>
</tr>
<tr>
<td><strong>Local conditions:</strong></td>
</tr>
<tr>
<td>8000 permanent employees (not including freelance)</td>
</tr>
<tr>
<td>Several hundred firms</td>
</tr>
<tr>
<td><strong>Planning cluster that originated in a concentration of broadcasting facilities:</strong></td>
</tr>
<tr>
<td>Governmental decisions started the cluster through location of MDR</td>
</tr>
<tr>
<td>MDR follows policy to split functions and subsidiaries among local service suppliers</td>
</tr>
<tr>
<td>Governmental decisions started the cluster through location of MDR</td>
</tr>
<tr>
<td>MDR follows policy to split functions and subsidiaries among local service suppliers</td>
</tr>
<tr>
<td><strong>Focus on location of independent producers and major broadcasters (BBC, ITV) highly influencing the cluster:</strong></td>
</tr>
<tr>
<td>Average company has good performance (financially)</td>
</tr>
<tr>
<td>Reliant on policy development</td>
</tr>
<tr>
<td>Focus on location of independent producers and major broadcasters (BBC, ITV) highly influencing the cluster:</td>
</tr>
<tr>
<td>Average company has good performance (financially)</td>
</tr>
<tr>
<td>Reliant on policy development</td>
</tr>
</tbody>
</table>


---

52
### Typology 3: The Specialized Area

<table>
<thead>
<tr>
<th>Geographical scale:</th>
<th>Topographical:</th>
<th>n.a.</th>
<th>n.a.</th>
<th>n.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location conditions:</td>
<td>Highest concentration of media activities in UK</td>
<td>Strong specialization in entire chain of film and TV</td>
<td>Strong specialization in entire chain of film and TV</td>
<td></td>
</tr>
<tr>
<td>- Creative and cultural life</td>
<td>&gt;70% of UK employment in media in London</td>
<td>Indigenous British media firms, global companies (Century Fox, Columbia)</td>
<td>Indigenous British media firms, global companies (Century Fox, Columbia)</td>
<td></td>
</tr>
<tr>
<td>- Strong infrastructures (e.g. Soho, established in 1995, linking firms with Hollywood)</td>
<td>Hollywood film producers, advertising MNEs, external broadcasting, monitoring post, film producers, post-production services, designers, photographers, advertising agencies and music groups</td>
<td>Hollywood film producers, advertising MNEs, external broadcasting, monitoring post, film producers, post-production services, designers, photographers, advertising agencies and music groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Informal gathering places like coffee shops, bars, restaurants</td>
<td>Diffusion of new ideas through employees from firm to firm</td>
<td>Diffusion of new ideas through employees from firm to firm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Exceptional pool of creative employees</td>
<td>Informal meetings and social interaction</td>
<td>Informal meetings and social interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local conditions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Second largest city in GE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Europe’s biggest seaports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Labour market structure points to tertiary sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Well-known district (inspiration, meeting places)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Urban environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topographical:</td>
<td>- Leading video game centre in Germany</td>
<td>- Worlds’ leading developers of browser games, video game-related start-ups founded by the cluster initiative gamecity:Hamburg</td>
<td>- Relatively young cluster: more than half of the firms started their business in 2007-2010</td>
<td></td>
</tr>
<tr>
<td>- High concentrations in publishing and advertisement, information technology sector</td>
<td>- High concentrations in publishing and advertisement, information technology sector</td>
<td>- Initiative gamecity:Hamburg was started in 2008</td>
<td>- Initiative gamecity:Hamburg</td>
<td>- Focus on the necessary proximity to the cluster of suppliers attracting firms</td>
</tr>
<tr>
<td>- Creative industries make up around 7% of Hamburg’s total employment rate</td>
<td>- Networking / knowledge and tech transfer between industry and academia</td>
<td>- Strong specialization in entire chain of film and TV</td>
<td>- Since 1918, Soho as residential place for the ‘Bohemians’</td>
<td></td>
</tr>
<tr>
<td>- Topological:</td>
<td></td>
<td>- Major MNE in media purchased premises (e.g. 20th Century Fox and Warner Brothers in the 1930s)</td>
<td>- Major MNE in media purchased premises (e.g. 20th Century Fox and Warner Brothers in the 1930s)</td>
<td></td>
</tr>
<tr>
<td>- Networking / knowledge and tech transfer between industry and academia</td>
<td></td>
<td>- Today, trend among firms to purchase all external services locally</td>
<td>- Today, trend among firms to purchase all external services locally</td>
<td></td>
</tr>
</tbody>
</table>

#### Plum & Hassink (2014): Hamburg, Germany

<table>
<thead>
<tr>
<th>Geographical scale:</th>
<th>Topographical:</th>
<th>n.a.</th>
<th>n.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>District of St. Paul</td>
<td>- Leading video game centre in Germany</td>
<td>Strong specialization in entire chain of film and TV</td>
<td>Strong specialization in entire chain of film and TV</td>
</tr>
<tr>
<td>Stretching towards surrounding districts like Barmbek-Süd</td>
<td>- High concentrations in publishing and advertisement, information technology sector</td>
<td>Indigenous British media firms, global companies (Century Fox, Columbia)</td>
<td>Indigenous British media firms, global companies (Century Fox, Columbia)</td>
</tr>
<tr>
<td>Local conditions:</td>
<td>- Creative industries make up around 7% of Hamburg’s total employment rate</td>
<td>Hollywood film producers, advertising MNEs, external broadcasting, monitoring post, film producers, post-production services, designers, photographers, advertising agencies and music groups</td>
<td>Hollywood film producers, advertising MNEs, external broadcasting, monitoring post, film producers, post-production services, designers, photographers, advertising agencies and music groups</td>
</tr>
<tr>
<td>- Second largest city in GE</td>
<td>- Networking / knowledge and tech transfer between industry and academia</td>
<td>Diffusion of new ideas through employees from firm to firm</td>
<td>Diffusion of new ideas through employees from firm to firm</td>
</tr>
<tr>
<td>- Europe’s biggest seaports</td>
<td>- Informal meetings and social interaction</td>
<td>Informal meetings and social interaction</td>
<td>Informal meetings and social interaction</td>
</tr>
<tr>
<td>- Labour market structure points to tertiary sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Well-known district (inspiration, meeting places)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Urban environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topographical:</td>
<td>- Worlds’ leading developers of browser games, video game-related start-ups founded by the cluster initiative gamecity:Hamburg</td>
<td>- Worlds’ leading developers of browser games, video game-related start-ups founded by the cluster initiative gamecity:Hamburg</td>
<td>- Relatively young cluster: more than half of the firms started their business in 2007-2010</td>
</tr>
<tr>
<td>- High concentrations in publishing and advertisement, information technology sector</td>
<td>- Worlds’ leading developers of browser games, video game-related start-ups founded by the cluster initiative gamecity:Hamburg, spin-offs from browser game firm, freelancers as most important actors, publishers and internet service providers</td>
<td>- Initiative gamecity:Hamburg was started in 2008</td>
<td>- Initiative gamecity:Hamburg was started in 2008</td>
</tr>
<tr>
<td>- Creative industries make up around 7% of Hamburg’s total employment rate</td>
<td>- Networking / knowledge and tech transfer between industry and academia</td>
<td>Predominantly micro and small enterprises</td>
<td>Predominantly micro and small enterprises</td>
</tr>
<tr>
<td>- Topological:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Networking / knowledge and tech transfer between industry and academia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Informal meetings and social interaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Britton & Legare (2005): Toronto, Canada

<table>
<thead>
<tr>
<th>Geographical scale:</th>
<th>Topographical:</th>
<th>n.a.</th>
<th>n.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central district area (Dundas and Front Streets)</td>
<td>- Largest new media centre in Canada</td>
<td>Support through organizations and institutions: G.A.M.E., AIMS and New Media Business Alliance</td>
<td>Support through organizations and institutions: G.A.M.E., AIMS and New Media Business Alliance</td>
</tr>
<tr>
<td>Stretching to surrounding mixed commercial, residential and (residual) industrial areas</td>
<td>- 37% of all Canada’s new media businesses in Toronto</td>
<td>Support through province of Ontario (Smart Toronto)</td>
<td>Support through province of Ontario (Smart Toronto)</td>
</tr>
<tr>
<td>Local conditions:</td>
<td>- 43% of businesses located in the central area</td>
<td>Funding of colleges in the field</td>
<td>Funding of colleges in the field</td>
</tr>
<tr>
<td>- Good transit access</td>
<td>Topological:</td>
<td>- Funding access on state level (e.g. New Media Fund)</td>
<td>- Funding access on state level (e.g. New Media Fund)</td>
</tr>
<tr>
<td>- Location for cheap rent</td>
<td>- Network of clients (entertainment sector)</td>
<td>- Support of institutions: AIMS and New Media Business Alliance</td>
<td>- Support of institutions: AIMS and New Media Business Alliance</td>
</tr>
<tr>
<td>- Talent pool of experienced, creative workers</td>
<td>- Substantial flow technical and creative knowledge</td>
<td>- Support through province of Ontario (Smart Toronto)</td>
<td>- Support through province of Ontario (Smart Toronto)</td>
</tr>
<tr>
<td>- Informal work atmosphere and club scene</td>
<td>- Advantages of networking and more visibility</td>
<td>- Funding of colleges in the field</td>
<td>- Funding of colleges in the field</td>
</tr>
<tr>
<td>25 firms</td>
<td>- 400 employed by world’s leading browser game developer</td>
<td>- Funding access on state level (e.g. New Media Fund)</td>
<td>- Funding access on state level (e.g. New Media Fund)</td>
</tr>
<tr>
<td>- 550 firms</td>
<td></td>
<td>- Support of institutions: AIMS and New Media Business Alliance</td>
<td>- Support of institutions: AIMS and New Media Business Alliance</td>
</tr>
<tr>
<td>- 4000-8000 people employed (freelancers etc. not possible to totally account for)</td>
<td>- Focus on various online services</td>
<td>- Support through province of Ontario (Smart Toronto)</td>
<td>- Support through province of Ontario (Smart Toronto)</td>
</tr>
<tr>
<td></td>
<td>Predominantly small-scale businesses, freelancers, consultants, programmers, and web-designers, hardware or software production, computer services, advertising</td>
<td>- Funding of colleges in the field</td>
<td>- Funding of colleges in the field</td>
</tr>
<tr>
<td></td>
<td>46% of firms employ 10 or fewer workers</td>
<td>- Funding access on state level (e.g. New Media Fund)</td>
<td>- Funding access on state level (e.g. New Media Fund)</td>
</tr>
<tr>
<td></td>
<td>Small number of larger companies or branch offices</td>
<td>- In the cluster organizations</td>
<td>- In the cluster organizations</td>
</tr>
<tr>
<td></td>
<td>Support of institutions: AIMS and New Media Business Alliance</td>
<td>- Support through province of Ontario (Smart Toronto)</td>
<td>- Support through province of Ontario (Smart Toronto)</td>
</tr>
</tbody>
</table>

#### Focus on close proximity of supply networks of specialized firms:
- Vertical relationships and the closeness to clients
- Project-based organization of production
- But: ultra-small businesses and freelancers, like design of basic websites, follow a strongly dispersed pattern as they might work from home

#### Plum & Hassink (2014): Hamburg, Germany

- Since 1918, Soho as residential place for the ‘Bohemians’
- Major MNE in media purchased premises (e.g. 20th Century Fox and Warner Brothers in the 1930s)
- Today, trend among firms to purchase all external services locally

#### Britton & Legare (2005): Toronto, Canada

- Since 40 years, film production support in Toronto
- Business-market firms were formed more recently (1995)
- Attraction through former warehouse and manufacturing buildings, where the relatively low rents during the 1990s encouraged localization
- Influence of the dot-com bust changes the cluster towards more specialization and collaboration, etc.

#### Focus on spatially concentrated communities of specialists:
- Also, strong knowledge transfer
- But: limited talent and not attractive enough for international talent

#### Focus on the necessary proximity to the cluster of suppliers attracting firms:
- Also, international linkages and knowledge exchange as main drivers
### Typology 4: The Attracting Enabler

<table>
<thead>
<tr>
<th>Location</th>
<th>Geographical scale:</th>
<th>Local conditions:</th>
<th>Topographical:</th>
<th>Specialization</th>
<th>Governing regulations</th>
<th>Focus on differentiation in function:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kratzke (2002) - Potsdam, Germany</td>
<td>- Babelsberg movie studio complex (46 hectare)</td>
<td>- Babelsberg (adjacent to Berlin) - Well-known reputation - Technical and infra-structure improvement - Competitors Munich + Berlin - Studios and other facilities, production capacity and financial facilities at spot</td>
<td>- Strong geographical closeness - Marked concentration in the Berlin-Brandenburg region for film industry (20%) and turnover (12.9%)</td>
<td>- Specialization in pre- and post-production of television and cinema</td>
<td>- Production location since 1912 - In the early 1990s there were 10 major production companies on the site - Now there are only three</td>
<td>- Supra-regional inter-firm links - Positive development in employment and turnover</td>
</tr>
<tr>
<td>Achtenhagen (2011) - Trollhättan, Sweden</td>
<td>- 'Trollywood' movie studios and surroundings (1,100 m²)</td>
<td>- Based in Trollhättan, Region of Västra Götaland - Production facilities - Pool of competent film workers - Educational opportunities - Formerly poor economic area At movie studio: production offices, mix studio, stage workshop, make-up, costume and dressing rooms, etc.</td>
<td>- Formal networks, organized seminars</td>
<td>- Specialization in pre-production, production, post-production and some distribution activities</td>
<td>- Policy implementation of cluster and mostly by a 'few key individuals' lobbying - Films are funded on the regional, national, and supra-national level - Sweden acknowledged that the creative industry plays an important regional role: Importing of talents, courses implemented, formal networks - Policy requirement to have staffed office in region of film funding mechanism</td>
<td>- Focus on high dependence on public financing and key actors: - Public-private partnerships - Revitalization of problematic region - Shifting of economic production from centre to periphery by politics</td>
</tr>
<tr>
<td>Goldsmith &amp; O'Regan (2003) - London, UK</td>
<td>- Pinewood and Shepperton (merge) studio complexes</td>
<td>- 30 km away from London - Largest studios in UK - Close to Heathrow airport - 30 km apart but linked through intranet - &gt;30 sound stages and facilities (connected to London), and digital TV facilities - Historically significant location for high-budget feature films</td>
<td>- Substantial agglomerations of media businesses Topological: - Intensive transactional networks - Dependence on American production finances</td>
<td>- Specialization on movie production and also TV</td>
<td>- Government supports and focuses on creative industries as growth sector</td>
<td>- Pinewood was built 1936 on a country estate and was further developed in 60s and gradually modernized till today - Shepperton was established as Sound City in 1931 - Merger of the two movie complexes in 2001</td>
</tr>
</tbody>
</table>

### Geographical scale: | Local conditions: | Topographical: | Specialization | Governing regulations | Focus on differentiation in function: |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Babelsberg movie studio complex (46 hectare)</td>
<td>- Babelsberg (adjacent to Berlin) - Well-known reputation - Technical and infra-structure improvement - Competitors Munich + Berlin - Studios and other facilities, production capacity and financial facilities at spot</td>
<td>- Strong geographical closeness - Marked concentration in the Berlin-Brandenburg region for film industry (20%) and turnover (12.9%)</td>
<td>- Specialization in pre- and post-production of television and cinema</td>
<td>- Production location since 1912 - In the early 1990s there were 10 major production companies on the site - Now there are only three</td>
<td>- Supra-regional inter-firm links - Positive development in employment and turnover</td>
</tr>
<tr>
<td>- Babelsberg (adjacent to Berlin)</td>
<td>- Well-known reputation - Technical and infra-structure improvement - Competitors Munich + Berlin - Studios and other facilities, production capacity and financial facilities at spot</td>
<td>- Strong geographical closeness - Marked concentration in the Berlin-Brandenburg region for film industry (20%) and turnover (12.9%)</td>
<td>- Specialization in pre- and post-production of television and cinema</td>
<td>- Production location since 1912 - In the early 1990s there were 10 major production companies on the site - Now there are only three</td>
<td>- Supra-regional inter-firm links - Positive development in employment and turnover</td>
</tr>
<tr>
<td>- Studios and other facilities, production capacity and financial facilities at spot</td>
<td>- Strong geographical closeness - Marked concentration in the Berlin-Brandenburg region for film industry (20%) and turnover (12.9%)</td>
<td>- Specialization in pre- and post-production of television and cinema</td>
<td>- Production location since 1912 - In the early 1990s there were 10 major production companies on the site - Now there are only three</td>
<td>- Supra-regional inter-firm links - Positive development in employment and turnover</td>
<td></td>
</tr>
</tbody>
</table>
### Typology 5: The Real-Estate

<table>
<thead>
<tr>
<th>Geographical scale:</th>
<th>Topographical:</th>
<th>Medium:</th>
<th>Broad focus on media broadcasting, publishing, printing, music, leisure, film</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 buildings (and more in construction) with 33,000 m²</td>
<td>High density (many firms and many people)</td>
<td>- 1400 firms (amongst only 2 Emirati firms)</td>
<td>- Defined area of 36 hectares</td>
</tr>
<tr>
<td>Local conditions:</td>
<td>Topological:</td>
<td>Topological:</td>
<td>- Created through specific planning of government and royal family</td>
</tr>
<tr>
<td>Dubai as international terminal: Airport, port, etc.</td>
<td>- DMC as a &quot;terminal&quot;, in which media companies can find skills, activities and operations</td>
<td>- Broad focus on media broadcasting, publishing, printing, music, leisure, film</td>
<td>- Targeting foreign media companies (who want to e.g. shoot movies in Middle East)</td>
</tr>
<tr>
<td>State-of-the-art infrastructure</td>
<td>- Very diversified from media companies to individual freelancers</td>
<td></td>
<td>- Goal is to be less dependent on oil - establish tertiary sector</td>
</tr>
<tr>
<td>Services provided: 1 hotels, free-trade zone, sister free zones (e.g. Dubai Internet City)</td>
<td>- Also: giants like CNN, Reuters, Sony Broadcast &amp; Professional, Bertelsmann, etc., along regional companies and new start-ups</td>
<td></td>
<td>- Services include e.g. visa processes, travel bookings</td>
</tr>
<tr>
<td>- Included housing complexes</td>
<td></td>
<td>- Dubai earns on rent and service charges while companies are tax-free</td>
<td>- Dubai holdings who owns the DMC also owns the Internet city the knowledge village, and other projects</td>
</tr>
<tr>
<td>- Good working environment</td>
<td></td>
<td>- A minimum start-up capital of 13,000 USD is needed to locate there and 5,000 USD for freelancers</td>
<td>- DMC also owns the DMC</td>
</tr>
<tr>
<td>- Only expat skills available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hilversum (2011) - Hilversum, Netherlands

<table>
<thead>
<tr>
<th>Geographical scale:</th>
<th>Topographical:</th>
<th>Medium:</th>
<th>Broad focus on media broadcasting, publishing, printing, music, leisure, film</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined area of 36 hectares with 300,000 m² of buildings</td>
<td>n.a.</td>
<td>- 200 companies in Media Park</td>
<td>- Created through specific planning of government and royal family</td>
</tr>
<tr>
<td>Local conditions:</td>
<td>- n.a.</td>
<td>- 115 firms make up 75% of employment</td>
<td>- Targeting foreign media companies (who want to e.g. shoot movies in Middle East)</td>
</tr>
<tr>
<td>North part of the city with Hilversum being the major media hub in the Netherlands (vide supra)</td>
<td></td>
<td></td>
<td>- Goal is to be less dependent on oil - establish tertiary sector</td>
</tr>
<tr>
<td>Medium-sized town (84,000 inhabitants)</td>
<td></td>
<td></td>
<td>- Services include e.g. visa processes, travel bookings</td>
</tr>
<tr>
<td>20 km southeast of Amsterdam</td>
<td></td>
<td></td>
<td>- Dubai earns on rent and service charges while companies are tax-free</td>
</tr>
<tr>
<td>Media Park has numerous studios and studio facilities</td>
<td></td>
<td></td>
<td>- Dubai holdings who owns the DMC also owns the DMC</td>
</tr>
</tbody>
</table>

### Summary

- **Media Clusters Brussels: DELIVERABLE 1.1c**
- Report on Classifying Media Clusters into a Typology
- Picard & Barkho (2011) - Dubai, United Arab Emirates
- Hitters (2011) - Hilversum, Netherlands
- Focus on real-estate provision and business development services:
  - Improves effectiveness and appeal
  - Dubai has successfully shifted its economy through such projects so that non-oil income constitutes now more than 90% of annual GDP
  - But: limited spill-over effects or cooperation support
- Main engines in Hilversum are the large broadcasting organizations and facilities companies that are located at the property of the Media Park
- But: appeal of Hilversum is shrinking due to competition from Amsterdam
### Typology 6: The Pooling Initiative


**Geographical scale:** Scotland

**Local conditions:**
- High respect for education, innovation, cultural life and spirit of enterprise
- Preference of Scottish students to attend local education
- Strong Scottish traditions in culture
- Emergence of film and multimedia as meaningful cluster and additional convergent sectors

**Topographical:**
- n.a.
- Topological:
  - Collaboration and consultation with industry representatives (trade associations, public-sector agencies and other cluster initiatives for spill-overs)
  - Organization of contacts and promotion of communication
  - Cooperation with for institutions like the Small Business Gateway, Scottish Arts Council

**70,000 full-time equivalent jobs in CI compared to electronics with 45,000 employees making it a substantial element of Scottish economy**
- 4% of Scottish GDP
- No information of number of members

**Focus on creative industries:**
- Music, design, publishing, new media, computer games, leisure software, films, broadcasting, advertising, architecture, cultural industries (one of 9 cluster initiatives)
- Typically, companies with fewer than 20 people but also large players (computer games, TV production, music)

**Scottish Enterprise as initiative:**
- Goals of the initiative are: business infrastructure / identification of talent / international reputation / interaction between industries and research
- Core team of initiative is made up of 5 representatives of local enterprises and 4 members of Scottish Enterprise National
- Strong political support
- No dedicated separate office

**1991, Scotland maintained strong effort to develop its economy pro-actively, with the install of the Scottish Enterprise with focus on cluster lines within region also on creative industry**

**Focus on Initiative’s interventions:**
- Improvement of linkages with industry and academia
- New spin-offs, more export penetration and attraction of new talents

**Additional projects:**
- Digital media quarter in Glasgow, Digital Media Park in Dundee, talent events, recruitment fairs, infrastructure projects, new and expanding agencies like Scottish Screen, TIGA Scotland, etc.

---

#### Parejo-Eastaway & Pradel (2010) - Barcelona, Spain: 22@

**Geographical scale:** Neighborhood Poblenou

**Local conditions:**
- 2km from Barcelona city centre
- A former industrial neighbourhood with new buildings, public parks, residential housing (220,000 m2) (urban renewal project)

**Topographical:**
- n.a.
- Topological:
  - Close proximity through networking and collaborations

**Several thousands of businesses in innovation district with 100,000 employees**
- 70 representatives within 22@Network initiative

**Focus on media among five others:**
- Businesses, universities, research, training centres, start-ups, tech firms (five cluster strategies: ICT, Bio-medical, Design, Energy and Media)

**22@Barcelona as initiative:**
- Budget of 180 million EUR
- 22@Network as official group of companies organizes monthly events and the annual Urban Cluster Day
- Policy of Scottish Enterprise has focus on "knowledge industries"
- 22@ in charge of urban planning and still creating architectural plans for future

**2006 period,**

**Public initiative of 22@ was officially launched in 2000**

**Focus on performance through initiative:**
- Public funding mechanisms that are goal oriented

---

#### Laur, Klofsten & Bienkowska (2012) - Hultsfred, Sweden: RockCity

**Geographical scale:** Sweden’s rural Hultsfred district

**Local conditions:**
- Situated in the sparsely populated countryside 120km away from the next city of 100,000 inhabitants
- Low accessibility by road and train (one of lowest in Europe)
- Traditionally manufacturing industry and low education

**Topographical:**
- Proximity within region around Hultsfred

**Close collaboration, networking and the Rock City building**

**Around 20 SMEs and additional institutions**

**Micro firms specializing in music and media.**
- Also: regional university (Linnaeus University), other business-intermediating organizations and Hultsfred Municipality

**RockCity as cluster initiative specialized in:**
- organizing festivals, providing informal networking meeting places for people and firms, linking actors to create partnerships, facilitating education and training
- The initiative is supported by regional and international funds

**Founded by a musician and his friends in 1996 as a result of their common interest and vision of establishing musical festivals in Hultsfred**
- During the 2000-06 period, Rock City was granted ERDF funds for five different development projects and later also EU funding

**Focus on positive influence of initiative for the region:**
- Attracting leading rock bands and festival visitors from all over the world and by providing music-oriented education and training to local people