What A Cluster Can Muster

A qualitative and comparative study about how film clusters in Sweden are built and operate

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Abstract:

This paper aims to analyze how the two largest film clusters in Sweden, that are Skåne and Gothenburg, are built and operated. The purpose is also to investigate the similarities and differences that can be observed between them. The intention of the paper is to give new insights on what factors should be taken into consideration to build and operate a successful cluster. The data comes from a qualitative study where five various actors from each cluster were profoundly interviewed. The results show that the clusters in Gothenburg and Skåne are very similar in their infrastructure, they are constructed according to what previous literature recommends, that is to say, they follow a set structure and function owing to a solid network and governmental funding. The most important difference between the two clusters is that Gothenburg is bigger both in size and in revenue. This variation is due to higher regional investment from Västra Götaland Regionen which surely believed in the success of the film cluster in the region and sustained its development.

Keywords:

Cluster, Film, Government, Gothenburg, Skåne

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1. Introduction

Over the last decade, the idea of clusters has emerged as a central idea in the economy. The main concept and benefits of innovation and productivity are becoming better known as a result of increased research and literature. With a greater understanding of clustering, it is becoming a permanent element in national and regional development plans. The number of clusters is rapidly growing and there are over hundreds of cluster initiatives launched all over the world. The clusters can take a wide array of forms and there is a universal lack of systematic knowledge of these cluster initiatives and how they are structured and operate. As resources allocated to clustering efforts and development are increased, the need to comprehend the best practices is becoming a priority (Sölvell, Lindqvist and Ketels, 2003). In its turn, it is well-known that movies are a powerful artistic medium in sustaining and developing cultural diversity and society as a whole. Film is important to entertain, start conversations and debates as well as influence and inform. This creates an interesting intersection between a creative and artistic industry where profit is limited and the cluster concept that is based on finding the most efficient way to create competitive advantage and profit.

1.1. An introduction to the cluster concept

The trend and discussion about "clusters" and "industrial systems" started in 1990 and has increasingly become more important for business policy and Swedish policymaking in order to contribute to innovation and development (Lindqvist, Sölvell and Malmberg, 2008). The concept was first coined in the late 1980s by Micheal Porter, focusing on business and the links between different industries. Later on, it has been extended to include other institutions, governments and academia. Today a cluster consists of related industries, within a limited geographical area, that are linked to each other by flows of information, knowledge and technology. These constitute the core of the cluster, surrounded by supporting and specialized organizations such as authorities and financial actors etc. The main idea with a cluster is for it to function as a framework for innovation and an alternative to vertical integration. There are a lot of well-known clusters such as Silicon Valley, Detroit and most importantly for this research: Hollywood, the cluster for the motion picture industry and one of the most dynamic and rich clusters in the world (Lindqvist, Sölvell and Malmberg, 2008). Although, Sölvell (2015) explicitizes everything is not a cluster; it is not the same as a local industry which normally stands for two-thirds of a country's employment. A local industry mimics the distribution of the population while clusters are over-represented in relation to the population and stand for about a third of a country's business structure (Sölvell, 2015).

1.2. An introduction to the film industry

1.2.1. The history of filmmaking

Film on a larger scale, in front of an audience, was first showcased in Sweden, in Malmö during the tradeshow IndustriMässan in 1896. The first movie to be produced in Sweden was made by the German brothers Max and Emil Skladanowskys and was named "Komiska möten på Djurgården i Stockholm". The ability to recreate and showcase reality in motion media was revolutionary in itself but the interest in capturing fiction and drama quickly grew and the consumer base too. Initially both film production and screening were ambulant but the market quickly transformed. Permanent film studios for recording and cinemas that showed new movies every week quickly became the new normal (Filminstitutet, 2021).

The first movies were quite short but quickly became longer and more advanced, demanding larger production and more complex processes. By the end of 1920 came two other technical reforms, the ability to produce movies with sound and color. In 1910 film studios in Hollywood established to a larger extent than previously and started to dominate the international market. Still many countries, Sweden included, have initiated well functioning film industries with color, genre preferences and actors. The second half of 1990 with its digitalization brought important changes to the film industry. Digital cameras, DVD, illegal streaming and downloading brought issues for the film industry to deal with. During the same time it became clear that the distribution of film would be through the internet and as a result, various streaming platforms were developed to leverage that opportunity. Many of these streaming platforms such as HBO, Netflix and Amazon are slowly taking over the role as producers. The traditional way of creating and producing film as well as how the market is organized and functions are giving way to new business models and value chains (Svenska Filminstitutet, 2021).

1.2.2. Film production and involved actors

Filmmaking is an industrial process involving a large set of different actors and companies which can take weeks, up to years to finalize depending on the scope. The production of film can be described through five essential stages. Firstly the development stage, consists of: idea creation, script draft and securing the majority of the finances. Secondly the pre-production, when everything is set the initial stages of the production start. A production company is established and production offices are set up. More staff becomes involved as the script, locations and budget are finalized. Shooting schedules are organized, gear and equipment are hired and auditions held. The film crew is recruited and together with line producers, the creative process is broken down. In the third stage, also known as the production stage, shooting begins and additional staff is hired to control every step of the process such as property, script, hair

and makeup etc. Additionally, supporting functions such as hotels, car services and catering are involved in this step. Picture and sound editors are also hired in this phase. The fourth phase is post-production which is where sound, picture and everything is cut and put together. If additional/special effects, voice over or music are required they are added in this phase too. The fifth and final step is distribution, this happens when the movie is finalized and ready to be showcased. Various marketing and promotion firms are involved in this step to spread the movie across different channels that might vary from theaters, DVD, streaming platforms to other digital media (MasterClass, 2020).

The Pre-production involves the following actors: production managers, production office, locations and art (art directors, property etc), sets and costumes. Production incorporates a broader set of production managers, camera, lighting, sound, property, hair and makeup, costumes, stunt performers, catering and actors. Post production requires editors, sound, visual effects and music (MasterClass, 2021).

1.3. Definitions

Film: Commercial films made for mass audience and the public with the aim to entertain. Not documentaries, art, advertisements etc.

Film industry: The film industry that is studied is mainly the areas in regards to the production of film, less focus is put on marketing and distribution. The commercial part of the film production is excluded, that is mass media, festivals, galas, celebrities etc.

Cluster: Companies and institutions within a particular field that are interconnected, and concentrated geographically. Cooperation and competition leading to innovation being key factors (Porter, 1998).

Actor: A legal entity that participates in economic activities in an economy.

Film commission: An organization that represents a certain region, promotes the destination as a film location and facilitates film production. A commission is created by the local government and can assist with financial support (Penn, 2022).

Infrastructure: Basic resources and commodities that make business activity possible in a certain industry.

1.4. Problem formulation

Film is an incredibly important part of Swedish culture and heritage. By experiencing film and different stories, important insights and conversations are created that contribute to strengthening the individual and the democracy (Svenska Filminstitutet, 2022). Hence it's important to keep the Swedish film clusters and develop them so they can continue to produce high quality films, generate stimulating conversations and provide insight.

Further, the film industry is currently in the beginning of a new shift. The way film is produced and consumed is changing. Streaming platforms are producing their own series and films with larger budgets and new demands. With this in mind, the film industry needs to adapt to meet these new standards and processes (Svenska Filminstitutet, 2021). The flexibility of a cluster, making it quick to adapt and stay relevant, creates an optimal system to foster innovation and continuous improvement in a changing industry (Lindqvist, Malmberg and Sölvell, 2008). In a fast-changing world, the ability to innovate, adapt and improve is a general need. This is often harder in smaller industries such as the film industry where demand might be lower and actors fewer. Thus there is an interest in investigating how smaller clusters are built, operated and can be improved.

The film industry is further of special interest since it is built on an unusually high amount of people and actors involved in one single project. Hence there is a lot of cooperation and many functions that need to resonate with each other. Additionally, the film industry is extremely money-driven. The industry's finances are limited while the actors are many and require large budgets. As a result of the fierce financial competition, cost-cutting is important while innovation and creativity are necessary. To conclude, cooperation and innovation play a central role in this industry, thus clusters become an ultimate and natural way of operating. Consequently, the film industry is an excellent industry to study in order to understand clusters, and additionally we get a better understanding of the film industry through a cluster-perspective.

Moreover, clusters create many synergies. Information, knowledge and technology are exchanged and improved at a faster pace. In addition, risks and costs are lowered, larger talent pools are at hand, many suppliers allow for lowered switching costs, less travel is required and the list goes on. With the growing number of clusters there is thus an urgent demand for investigating how these synergies are created and arise in the cluster.

1.5. Purpose and research question

The purpose of this research is to explore and explain how Swedish film clusters are built and operate. The study will use a descriptive perspective, focusing on the infrastructure, analyzing how actors co-create and co-exist and what roles they play in the cluster. This thesis will also use a comparative framework to highlight similarities and differences between two Swedish film clusters, Skåne and Gothenburg, in order to explain different levels of success. To achieve the purpose, the study will answer the following two questions:

- 1) How are the two Swedish film clusters in Skåne and Gothenburg built and how do they operate?
- 2) What are the differences and similarities between the film cluster in Skåne and the one in Gothenburg?

1.6. Delimitations

The research focuses on the film production; that is pre production, production and post production, but not on the marketing and distribution of the film. This is due to the fact that these parts are not concentrated in the cluster. There are some marketing firms, but they are not relevant to the study, since the films are distributed and marketed across the world through different firms in various locations. The research is limited to Sweden and more specifically to Gothenburg and Skåne. The research aims to study Sweden since there are big differences between nations, both in regards to clustering and the film industry. Clusters similar to those in Skåne and Gothenburg arguably exist in Nord and Stockholm, but since Skåne and Gothenburg are the most active and used production sites, these two have been chosen as the target research locations. Two locations were chosen to enable an extensive analysis in one location while comparing similarities and differences. As a consequence, the results risk not being applicable to other locations, especially outside Sweden. The research is to be considered descriptive and not aimed towards presenting and analyzing any statistics nor reaching any precise global generalizations. The study is also limited to a few interviewees representing certain actors in the cluster. This research has tried to interview as many different actors of different sizes and on different levels as possible, and to include both private and public actors. Although, not all actors are represented in the study; the focus has been to interview actors in the core of the cluster and not the periphery.

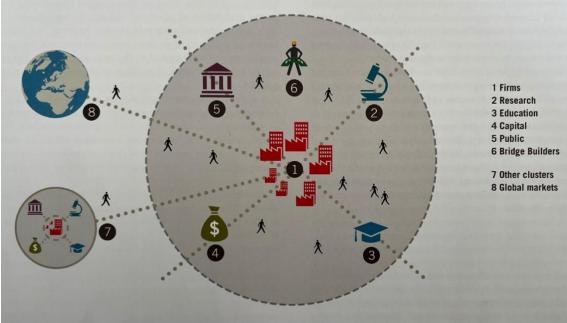
1.7. Expected contribution

The study aims to provide primarily the Swedish film industry and its actors with useful insights about how a film cluster practically operates. The study shall shed light on formal as well as informal processes that contribute to establishing the cluster's infrastructure and behavior. This is in order for them to understand and get more perspective on how clusters function and what can be done to develop them and further strengthen their position in the national and international sphere. This thesis will also bring insight into a small, specific industry cluster and contribute to a broader knowledge on how smaller clusters are built and behave in practice. Which in its turn can contribute to how actors choose to develop and establish new clusters. The thesis provides descriptive research on a smaller, yet important Swedish industry and its clusters, which has not previously been investigated. This together with the film industry being heavily government funded, adds another dimension to cluster research, hence filling a research gap.

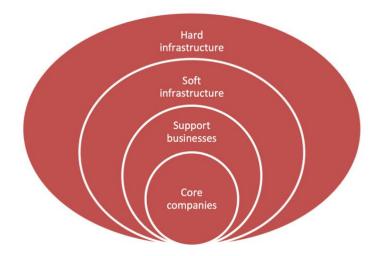
2. Previous literature and theoretical framework

2.1. Actors involved in a cluster

The principal types of actors in a cluster can be grouped into four different categories and are arranged according to the pictures (Maxwell Stamp Inc, 2012):



Source: Sölvell (2015)



Source: Maxwell Stamp Inc (2012)

Core companies consist of lead firms that are at the origin of the innovation. They can be large companies or individual entrepreneurs (Sölvell, 2015). Support businesses are

organizations directly or indirectly supporting the core businesses such as suppliers of inputs, machinery, services, infrastructure, raw materials, capital providers investing in the different projects and businesses of the cluster etc (Porter, 1998, Sölvell, 2015). Soft infrastrastructure includes all the other supporting community actors. For instance, there are public bodies as the government regulating the industry, education organizations, networking organizations such as innovation offices, incubators etc but also outside actors from other fields of technology (Porter, 1998, Sölvell, 2015).

For the cluster to be dynamic, innovative and efficient, all these actors should try to create a dense inside network (Sölvell, 2015). A cluster can also be expanded to complementary products that use the same inputs and skills etc. The boundaries of the clusters are set by linkages and complementarities that are most important to competitiveness (Porter, 1998). Clusters can also have different degrees of agglomeration, which means that some clusters can be a part of a larger agglomeration and located in places surrounded by rivals, suppliers, buyers and all types of actors, whereas others can be almost completely isolated (Sölwell, 2015).

These models help understand the different actors and how they are organized. This will act as a starting point for comprehending and later analyzing how the actors are arranged and related to each other in the clusters.

2.2. Clusters and economies of competition

In an agglomeration classification scheme, the cluster is an agglomeration of actors that are technology related and whose cooperation and competition lead to innovation advantages and to knowledge creation and diffusion. Clusters can be seen as:

Dynamic arrangements based on knowledge creation, increasing returns and innovation in a broad sense (Sölvell, 2015 p. 68-69).

They are innovation centers where the composing actors, formally and informally, share information and expertise (Sölvell, 2015). Hence clusters represent an alternative to vertical integration, networks, alliances, partnerships in order to be more flexible, efficient and effective (Porter, 1998). What distinguishes a cluster from these other forms is that it is linked together either/both vertically and/or horizontally and it is geographically concentrated. With these clusters come mutual dependencies and support. Benefits flow backward, forward, horizontally and vertically. They are a network of companies competing and cooperating and sometimes both simultaneously. No matter, it leads to maintaining diversity, continuous improvement and innovation, further prevents inward focus, inertia and inflexibility (Porter, 1990)

According to Porter (1990) a nation's competitive advantage is created and sustained through its ability to innovate and upgrade. The driving forces being pressure and challenge from domestic rivals, aggressive local suppliers and demanding local customers. With this Porter (1990) is opposing the traditional view that competitive

advantage is based on a country's natural endowments, labor pool, interest rates, currency value etc. The innovations forming a competitive advantage can be rather mundane and small such as a new product design, process or marketing plan rather than a major breakthrough. Although, the innovations must constantly be improved and upgraded in order to sustain the competitive advantage (Porter, 1990).

The ability to constantly innovate is dependent on four attributes and what Porter (1990) calls the diamond of national advantage.

- 1) Factor conditions
- 2) Demand conditions
- 3) Related and supporting industries
- 4) Firm strategy, structure and rivalry

Porter (1990) presents efficient clusters as a competitive advantage which have three main beneficial effects on business:

- 1) Increase productivity
- 2) Drive direction and innovation due to productivity growth
- 3) Stimulate formation of new businesses

A cluster allows each member to benefit as if it had greater scale or as if it had joined with others formally—without requiring it to sacrifice its flexibility (Porter, 1990)

Through a cluster companies can easily and more efficiently source information, technology and institutions. Together they can coordinate and improve. There is also a large base of suppliers and pools of talented employees to tap into, both lowering risk and cost. Another important benefit from the cluster is its complementarities. The linkages among the members in the cluster are greater than the sum of its parts. Together the members of the cluster can deliver a complete solution and meet a consumer need that can not otherwise be met. That way a customer can multi source, easily switch suppliers, travel less and save costs. This also has spillover effects on marketing since a cluster enhances the reputation of a certain location in particular fields, making it more likely for a customer to choose an actor there (Porter, 1990).

This paragraph extends into explaining how the dynamics of a cluster work. It states that the core of the cluster is innovation which enables a competitive advantage. This will hence be the starting point of this thesis. It also brings up what components are necessary and need to be considered in order to sustain the innovative competitive advantage. This will later be used to explain why or why not it is obtained.

2.3. Building a cluster

According to Porter (1990) clusters can be constructed in many different ways. A cluster often originates from historical events or circumstances, which means that a

cluster builds itself in a particular location that has a particular competitive advantage. For example the dutch transportation cluster was built thanks to its central location and waterways network and its long maritime history. In the second alternative, the cluster is based on an unusual local demand, a specific product or service that is demanded by customers in this area. For instance the environmental cluster in Finland is due to pollution problems caused by industries within the area. Thirdly, clusters can also arise as a consequence of prior supplier industries or related industries. One or two innovative companies can create opportunities for other actors to grow by expanding into a new cluster within a closely related industry. It can also be a chance event causing advantages for fostering a cluster (Porter, 1990). A fifth possibility for a cluster to grow can be derived from the labor market. This type of cluster will grow in a region with large labor market pooling, meaning areas attracting workers with specific skills and knowledge required, leading to high employment opportunities. The sixth growth opportunity can be issued from social, institutional and cultural aspects which means that the cluster is built historically, either following path dependencies or because the location is characterized by sharing and trust between the different actors (Wolman and Hincapie, 2010). The final initial stimuli to create a cluster is governmental intervention e.g. contribution to Research and Development facilities (Maxwell Stamp Inc, 2012). As soon as a cluster is on the rise a self-reinforcing cycle is created promoting its own growth and new actors joining the opportunity that a cluster signals (Porter, 1998).

Porter (1998) states that as an actor in a cluster, the following strategic aspects must be taken into consideration to understand a cluster and succeed in building it:

- Choosing locations: With globalization it's easy to choose location based on low wages, taxes or utility costs which are visible and easily measurable costs. On the other hand one might neglect that they lack infrastructure, sophisticated suppliers and other cost savings that can offset the savings from low input costs.
- Engage locally: A cluster is bound together by social glue and gives access to important information and resources. To be able to tap into valuable assets and inside information one needs to establish personal relationships, face-to-face contact and a common platform.
- 3) Upgrading the cluster: Upgrading the cluster will have positive spillover effects and upgrade the company. Everyone in the cluster benefits from a strong infrastructure and support functions.
- 4) Working collectively: Not only the government, but private actors should also work to develop the cluster. By joining forces, investments in public goods and services can be done successfully (Porter, 1998)

Ensuring a successful cluster demands continuous work on the following four aspects, that form the people dimensions (Maxwell Stamp Inc, 2012):



Source: Maxwell Stamp Inc, 2012

Cooperation towards common goals refers to creating alliances and working collectively, not only improving one's own competitiveness but at a collective level. Building networks and high performance systems enables results that would not be achieved on an individual level. Business networking is another important factor. In order to cooperate, extensive informal and formal networking have to occur both horizontally with firms on the same level and vertically with their supporting infrastructures. Soft networks in the form of trade associations etc are equally important as hard networks with strategic alliances between firms. The third aspect is teamwork, i.e. working together to innovate. One actor seldom has all the resources, knowledge and assets to innovate on a larger scale. By working closely together and exchanging resources and knowledge, groundbreaking innovations can take place. Lastly, linking and aligning the different elements contributes to successful clustering. An effective cluster links private and public actors, innovations, systems, networks and facilitates a "whole of government" (Maxwell Stamp Inc, 2012).

This segment sheds light on the building blocks and initial start of a cluster. This will be used to understand and analyze Skåne and Gothenburg's initial stages of their cluster creation.

2.4. The government's role

Porter (1998) discusses the government's role in creating clusters and building competitive advantages. Porter (1998) claims the government's role is to work as a catalyst. That is to encourage, aspire and move to higher competitive performance that otherwise is dreadful or extremely difficult for individual firms. The government cannot build and create a competitive advantage, only companies can do that. The government needs to work with parties in the cluster under the right conditions to succeed. It should

in Porters (1998) meaning indirectly participate in creating the right environment in order for the companies to build their competitive advantage. This means helping companies to upgrade human skills, invest in products and processes etc. The government's role is to promote cluster formation, reinforce development of clusters. It should not choose among clusters since some may be malfunctioning. Neither should they try to create new ones, the market forces need to determine cluster formation but the government can help (Porter, 1998). The Maxwell Stamp Inc report (2012) further strengthens Porter's view on the government's role in cluster creation. Once again it's stated that the government cannot create clusters but rather create businesses, innovation and institutional environments which can be vital for the success of a cluster. This is mainly essential in the initial stages and can both be direct with financial aid but also by policies, strategic plans etc. To summarize, the government should enable and remove obstacles for clusters to succeed but should not be the driving force (Maxwell Stamp Inc, 2012).

Wolman and Hincapie (2010) conclude it has become essential for policy makers to take part in different cluster initiatives to benefit their region and reach higher regional economic growth and development. The government and local policy makers should be in constant communication with the cluster members to understand how their public policies can be improved. As explained previously, clusters are often built naturally and it is thus difficult for the government to create a cluster or to strengthen an extremely weak one. However, policy makers can do their best to improve and facilitate the cluster operations in already existing clusters. Wolman and Hincapie (2010) made a list of the most important things they should focus on when aiming at regional economic development by improving the cluster's productivity:

- 1) Focus on clusters for which the region has existing assets, as evidenced by some existing concentration.
- 2) Focus on clusters for which the region has a competitive advantage relative to other regions. Focus on clusters that are growing nationally.
- 3) Focus on clusters for which an intervention strategy is possible and for which intervention will make a difference in terms of affecting economic development objectives.
- Focus on clusters whose impacts or externalities particularly serve public purposes (e.g. employ more entry level labor or promote energy efficiency) (Wolman and Hincapie, 2010 p. 33).

To conclude, the government should contribute to the development of clusters by for instance providing amenities, facilitating knowledge spillovers and information exchange. This can be achieved through the creation of strong networks with the different cluster members, improving technical support services etc, but it should not directly intervene in their functioning (Wolman and Hincapie, 2010).

The government plays a crucial role in the business field in the research nation (Sweden), hence it is important to get a theoretical viewpoint of how the government is supposed to operate in a cluster. This will later be compared to how the government actually participated in the researched Swedish clusters.

2.5. Informal networks

Within a cluster, knowledge and information flow freely and are exchanged through informal contacts. Dahl and Pedersen's research (2004) studying how information is shared in clusters, showed that a large proportion of the respondents acquired knowledge of high relevance to their work from their social contacts. Even specific knowledge about new products, innovations etc were shared to a large extent. This shows informal contacts are a crucial source of innovation and knowledge as well as essential to operate and cooperate in a cluster. When different actors from the cluster meet in a social environment, specific matters are discussed in a more casual and informal way, increasing knowledge sharing. Even firm specific details and current projects, which the firms likely want to protect from competitors, are shared under these conditions. Further, more than 60% of the respondents in the survey stated the information shared informally was of medium to high value in a professional context. To conclude, a lot of valuable information is shared through informal networks in a cluster (Dahl and Pedersen, 2004).

This paper offers another perspective and explains how a cluster operates and functions on the inside as an alternative to what the other models suggest (even if they also bring up networking). The research concretizes what is invisible and as easy to pinpoint, making it possible to research this subject as one of the main areas.

2.6. Dysfunctions

According to Sölvell (2015) all clusters don't exploit their potential for economic growth at the same level, some are more productive and dynamic than others. This difference between clusters' efficiency can be due to natural causes such as the stage of development the cluster is in and the regional advantage it exploits. It can also be a consequence of the quality of the cluster based on the character of the interaction between the different actors. These interactions can be defined as the flow of information but also of knowledge and resource sharing (Sölvell, 2015).

The 7 Cluster Gaps Model was developed to understand how clusters work, based on the size of the gaps between the various actors of the cluster. According to the theory, the larger these gaps are, the less dynamic and innovative the cluster usually is (Sölvell, 2015).

Clusters form an environment where innovation is facilitated through all the interactions between the main actors. Colleges offer specialized education within the cluster, capital

providers accommodate advanced risk analysis and local governments make decisions that promote the cluster. The more collaboration and coordination between these actors, the more dynamic the cluster is and the more knowledge is created and shared (Sölvell, 2015).

Sölvell (2015) describes that the innovation level and economic growth of the cluster depend on how well the different parts of the cluster fit together and how they always are reorganized to improve productivity. It is the network inside the cluster that is crucial. The cluster offers an environment in which different resources and capabilities are constantly shared and rearranged to maximize its efficiency. However in reality, clusters often lack communication between actors, preventing them from interacting as they should. This weak interaction can be due to several factors such as the lack of trust and common language or understanding of norms and attitudes, poor knowledge and negative incentives to collaborate. Sölvell has developed a model where there exist seven major gaps separating these actors (Sölvell, 2015)

- The Firm-to-Firm gap
- The Firm-to-Research gap
- The Firm-to-Education gap
- The Firm-to-Capital gap
- The Firm-to-Public actors gap
- The Firm-to-Cluster gap
- The Firm-to-Global markets gap

Consequently, one of the critical goals of the cluster members should be to manage to build a real identity and branding of the cluster and create a common vision (Sölvell, 2015).

This paragraph brings up potential pitfalls for clusters, this will function as a starting point for analyzing potential malfunctions of the industry and help create a framework for how the clusters can be improved.

3. Method

3.1. Scientific approach

This thesis aims to explore and explain how Swedish film clusters are built and operate, further to compare the two film clusters Skåne and Gothenburg. In order to achieve this, this paper is based on a comparative case study. Further it is mainly based on deductive reasoning, that is to say both clusters, Skåne and Gothenburg, are studied from a theoretical point of view and compared to how it complies with the reality in these areas. A framework is first based on theories and previous research and later tested in reality. However, not only deductive reasoning is used since the aim of the paper is not to confirm or falsify the theories used in the research. Therefore it is a combination of both inductive and deductive reasoning. The inductive reasoning consists in going from specific observations to general theories, which has partly been the case in this thesis. Nevertheless, the data collection and theoretical research have been going on parallely (Bell et al., 2007). Starting by collecting various theories, articles and researches about clusters to form a theoretical viewpoint and base for the study, followed by data collection through interviews. In parallel, new theories and perspectives have been added as interviews opened up for further reading and research. Therefore, the literature about how clusters are defined and built, how they work, why some succeed more than others, and what they do to become efficient and achieve economic development was studied. Then, experts or actors from the two clusters in question were interviewed. Finally, a comparison between the results from the case studies was done and they were simultaneously compared to the theory which enabled drawing conclusions.

3.2. Qualitative method

This case study will be processed with a qualitative method with the use of in-depth interviews. The qualitative study seemed to be the most appropriate to this research since the problem formulation is a descriptive *how* question. The questions asked during the interviews could not be answered with numbers on a scale and didn't require any statistics to be analyzed (Bell et al., 2007). In addition, experienced people in the field were needed, who would be able to answer precisely with detailed and elaborated explanations. Therefore, the respondents had to be chosen carefully, they could not be interviewed randomly. Moreover, the qualitative study enabled asking open questions and adapting other questions to the answers of the interviewees. They could also give some historical perspective if they had some, which would probably not have been possible with a quantitative study.

3.3. Sample, Data collection and Interview design

The interviews were divided into two categories by region. Both Skåne and Gothenburg enjoy the success of a movie cluster in their region. These two clusters were selected

because they are the largest movie clusters in Sweden after Stockholm, which is less defined as a cluster. The aim is to analyze both the Gothenburg cluster and the Skåne cluster separately, to later compare them and try to find similarities and differences to explain.

In total ten persons were interviewed, five from Skåne and five from Gothenburg. This number was chosen to be able to get a broad view of the clusters yet enabled the study to deepen and get precise and detailed information. The goal was to interview between 10 and 15 persons. Ten people enabled a sufficient degree of data collection to achieve the thesis purpose, nevertheless being a manageable amount of data for the scope of this paper. Nine of the respondents were actors of the cluster participating in the movie production, for example members from investment organizations and other actors such as producers. One of the interviewees was politically engaged in the cultural department of Västra Götaland Regionen. This to get a governmental and political viewpoint on the cluster since they appeared to play a prominent role. Different types of participants were chosen to get a complete view of the functioning of the cluster. The financing organizations offered a clear perspective on how to operate a cluster and build a global network whilst the more direct participants provided a view on how to create personal contacts and participate in different projects, and an insight on how to personally succeed within a cluster. Moreover, some respondents were randomly found through an online register of film industry actors. After finding one central and involved actor with an extensive network in each cluster, a total of five people participating in the research was recommended. This further strengthened the quality of the interviewees and gave access to people in key positions, otherwise unreachable. As for the politician, the administration of the cultural department in Västra Götaland was contacted, and contact details to an appropriate politician were acquired.

The interviews were held digitally through Zoom in Swedish since all the interviewees were native speakers. They were all approximately of the same duration, between 45 and 60 minutes and a template was used, see Appendix 1. Indeed, all the questions were formulated in a template before the first interview so that every interviewee would get the same questions, that way it is easier to compare the answers. As stated earlier, the questions were also sometimes adapted to the answers of the respondents. In order to attain as detailed and accurate data as possible, the script was occasionally deviated from to more individual and spontaneous follow-up questions.

3.4. Processing of data

All interviews were processed according to the script. The questions all concerned how the cluster has been constructed, what the different actors are, which role they play within the cluster and what relationship they have with each other, all with the purpose of understanding all the different dynamics in the cluster. As explained to the interviewees before starting, both authors of this thesis were present during all interviews, the same one was always asking the questions ensuring a systematical and uniform data collection. The second author was taking notes of everything in real time. Directly after each interview the notes were discussed and the interviewing author added eventual missing relevant information. The interviews were further summarized after each session to enable an easier and smoother comparison and analysis of all data later on. The interviews were not transcribed nor recorded since one of the respondents was not comfortable with it. It was then agreed that it would be better if all the interviews were done according to the same unfolding. Since the aim of the study is to draw bigger general conclusions in how Swedish film clusters are built and operate, further to compare the two film clusters, shorter summaries of the interviews were easier to manage. The summaries were also estimated to result in more accurate analysis when only the relevant core information was analyzed and smaller details causing clutter were removed. A detailed transcribed collection of all data was estimated to 50-60 pages making conclusions and comparisons later in the research difficult. Hence summaries were easier to handle and resulted in more accurate patterns being identified. Moreover, the risk that the respondents hold back information and opinions is higher when the interviews are recorded. On the other hand, it can be argued that recorded and transcribed interviews would generate more accurate and objective data. However, a qualitative research will always be somewhat biased by the authors and the advantages were estimated to uplift the disadvantages in this study.

After gathering all the data, the authors proceeded with a thematic analysis. That is, going through the summaries and identifying common/recurring themes related to the research area and research question. This was made by the authors separately to remain as objective as possible and compared at a later stage. In addition the texts were read and reread repeatedly and at different times to avoid bias. The thematic analysis enables identification of patterns and creates an understanding of the data enabling drawing connections and conclusions. The themes were identified by codes: sentrences, words, expressions and similarities in topics etc. The identified codes were then categorized in order to make out the themes. (Bell et al., 2007).

3.5. Reliability and validity

Finally, it is essential to ensure the quality of the research and that it is trustworthy. The reliability should measure how consistent the data and measurements are, that is to say what is the margin of error and if the same process has been used for each interview to guarantee that all the answers are reliable (Bell et al., 2007). As stated before, a template was used to ensure that the data is reliable, so the same questions were asked to every interviewee and not biased. As earlier described, all the interviews were the same length, so approximately the same amount of questions was asked to every respondent too and all the interviews were conducted in the same period of time (in

March or April). In addition, one author was only focusing on taking notes, and the notes were taken almost as transcribing. The note taker practically wrote down the exact words of the person that was interviewed when the answer seemed relevant.

Secondly, the validity measures how valid the collected data is outside of the study, that is to say if the data can be generalized and if the questions measure what they intend to measure. However, validity in a qualitative study can be difficult to measure. But acceptable validity can be achieved by specifying that all the interviewees can be seen as a representative actor of their role since they all had expertise about the research field (Bell et al., 2007).

4. Results

4.1. Gothenburg

4.1.1. The cluster

The film cluster in Gothenburg consists of a large variety of companies that represent every step in the film production phase, these constitute the core companies. Further there are established supporting businesses, such as hotels, technological equipment providers, car rentals, restaurants etc. All these are located within one concentrated geographical area. The government has a high presence, primarily through Film i Väst but also through Västra Götalands Kulturförvaltning arranging festivals, events, fairs, education etc. There are also other private organizations such as industry associations, working to expand and develop knowledge and networks.

The key actors in the industry are Film i Väst and Gothenburg Film Studios. Film i Väst mainly works as a financing function in the cluster and as a film commissioner, while Gothenburg Film Studios is the actor who coordinates and ties the industry together. Gothenburg Film Studios actively engages in the industry and owns some production offices, studios, after production facilities. While Film i Väst aims to own as little as possible and stay involved indirectly. Although if there is a gap in the market, for example an important component of the infrastructure is missing, Film i Väst intervenes. Firstly, they try to get a new or existing actor to fill the gap, only as a last resort Film i Väst would own a facility.

Another important factor for Gothenburg's film cluster is its location. It is located in the middle of Sweden, close to Stockholm and around a big city with good hard infrastructure and supporting functions. This makes the region attractive both for national as well as international film productions.

4.1.2. Building the cluster

The first spark of the Swedish quality drama industry dates back to 1974 when the movie The Texas Chain Saw Massacre was released. This provoked an enormous reaction and as a result Svenska Filminstitutet decided to make investments into the Swedish film industry to extend Swedish culture and high quality film. This came to reality through a national decision to create four regional film funds, one of them being Film i Väst. Previously film was created on a larger scale solely in Stockholm. Within an industry that requires high expenses and investment, money is a key factor. Thus, over time more companies moved or started in the Gothenburg area because of Film i Väst.

Up until approximately ten years ago, the industry was rather unorganized, which is why the privately owned and operated company Gothenburg Film Studios was founded. Gothenburg Film Studios wanted to gather the industry and create a united identity. This was made through industry associations and by building a block in the Gothenburg area. In the neighborhood they provide studios and rent out offices/spaces for other film actors. With this core companies were brought even closer, not only in the literal sense, and a better infrastructure was built. Gothenburg Film Studios individually and in cooperation with other private actors do continuous work to develop the cluster, arranging fairs, seminars, meetings, trade shows and more.

You have to have an interest in building the industry and not just your own company, it is hard to develop and gather actors when you only care about yourself. My goal is to contribute to something that is bigger than ourselves, not only make money. If money was the only factor, we would not organize and carry all these projects (Interviewee 4, 2022)

4.1.3. Government

As previously mentioned, the government's role is very important since film production is driven by their investments. With large expenses, long time horizons and negative to little return, there are few private investors. Hence the film industry in general in Sweden and in Gothenburg is dependent on governmental contributions which gives them a lot of power in the cluster. In Gothenburg the organization Film i Väst gets tax money from the region and invests in movies with the requirement that it needs to be spent in the region. This to generate jobs and a boost for regional businesses and culture.

Film i Väst has the largest wallet and thus, the most power (Interviewee 1, 2022)

Although, the government and Film i Väst do not only play a financial role. They also work to connect, coordinate and develop the industry. For example, the film commissioners, arrange trade shows, seminars and workshops. Further, Film i Väst educates and casts new talents and sheds light on filmart. They also try to coordinate processes and build infrastructure through for example a database, collecting all actors involved in film creation.

Ever since the year 2000, Västra Götaland has been spending a lot of money on the film industry. The region, that is the politicians, perceives the value of cultural and creative projects to be of high value. It creates revenues, jobs, publicity and gives joy to the region. One study made by the region states the return on investment is 4,5 times the initial investment and a film production is estimated to involve around 200 actors. Because there is both a cultural value and an economic value, Film i Väst gets money from both Kulturnämnden and Utvecklingsnämnden. In the beginning of the 20th century the EU contributed with subsidy to the film regions in Sweden and when this

came to an end the region decided to themselves continue to match this subsidy. The region believes film is one of the most important art forms that touches and engages the citizens, which can further be strengthened by the heavy funding of performing arts, for example the Göteborgs Operan. The region invests approximately 800 SEK per capita per year in culture and Film i Väst got total contributions of 106 MSEK in 2022. One could also argue that Film i Väst have managed to invest in the right movies at the right time and as a result kept their position and trustworthiness among politicians. Films they have coproduced have been nominated for The Oscars and The Plame d'Or. Another reason behind the heavy funding of film production in Gothenburg is the promotion of a large cultural budget by engaged and skilled politicians. One specific politician that has been very active, Lars Nordström, was mentioned in the interviews.

4.1.4. Informal networks

Film i Väst provides a database consisting of different registers, aimed to help coproduction partners to source employees and partners. This database has been created by gathering lists after different coproductions and contacting relevant actors in the area. Although this type of formal network is rarely used in practice. Firstly this process is much simpler nowadays when Google exists, hence the database has become more of a quality register. Secondly and most importantly producers and managers use their own informal contacts and connections. These consist of friends, partnerships and actors from previous work and recruitments. This is true for everything from recruiting people to renting cars. The reason behind this is better prices are offered to recurring customers or friends. However, mainly since the quality and the results can be assured beforehand. These informal contacts form huge informal networks. For example, the producer hires their line producer they usually work with which in its turn hires a technician they know, who rents equipment from the company they typically use and so on. Since the industry is quite small there is a certain familiarity and everybody knows of each other, hence:

You quickly determine who you want to work with (Interviewee 3, 2022).

These informal networks are especially important in the film industry since everything is done on a project basis. New projects constantly require new recruitments and companies are dependent on continuous projects.

4.1.5. Dysfunctions

One of the core aspects of clustering is that firms concentrated in the same region and industry tend to get more competitive and therefore benefit from knowledge spillovers, lowered costs and increased productivity. Although the competition in the film industry in Gothenburg seems to be lacking. First the industry as a whole is quite limited and secondly there is a great aspect of artistry. Since both the region and the industry are relatively small the competition is limited, almost everyone is needed since budgets and the movies themselves are different. It is not rare that competitors have to work together and combine their resources in order to finish a movie. Films are also very unique products and hence two films and two artists can not really compete against each other. The hardest competition takes place at Filminstitutet or Film i Väst when applying for funding.

4.2. Skåne

4.2.1. The cluster

The movie cluster in Skåne is composed of all types of companies related to the movie industry, that is to say firms that directly participate in the film production such as producers, studio owners, material renting firms etc, but also both private and public investing organizations. Thus, actors from all groups are represented in this cluster.

The key actors in the Skåne cluster are Film I Skåne and the large production firms. Firstly, Film I Skåne is a major actor since they worked hard to get this cluster developed and funds from Svenska Filminstitutet among others. Their primary role is to finance the movie productions. When a production firm has an idea, they almost always go to Film i Skåne to apply for funding. However, their goal is also to construct the infrastructure and create possibilities by generating opportunities, developing skills, but also conditions outside the municipality to facilitate the movie production. They are the most important because the fact that producers come to them for financing makes them very powerful within this industry in Skåne. They are the only ones in the region who are able to provide consequent financial support. Film I Skåne also works as a film commissioner in the region, facilitating productions. The other most important actors are indeed the most famous production firms like Anagram and SVT for instance. Evidently the business cannot grow if they do not provide ideas and projects to develop movies. Moreover, the production firms are the ones that attract the filmmakers and create the job opportunities in the region. In effect, when producing a movie, they hire costume providers, photographers, makeup artists etc, which generates jobs.

Film I Skåne has also created a platform named filmjobb.com where one can register as a filmmaker. The aim is thus to create a huge database making it easier both to find specialized filmmakers for upcoming projects, and for filmmakers to be hired.

Finally, the cluster in Skåne arose naturally due to intrinsic conditions. A lot of producers that come to the region to create a movie choose it for its beautiful landscapes and open spaces.

4.2.2. Building the cluster

According to the results obtained from the interviews of people working in the cluster, the development of movie clusters in Sweden, including the one in Skåne, originates in the release of The Texas Chain Saw Massacre which got very controversial. The government thus wanted to ensure movie quality and developed the will to build a solid movie industry in Sweden. This led to the implementation of the four filmfunds in Sweden that are in Luleå, Stockholm, Skåne and Väst. These four are now responsible for investing in high quality film projects.

There already was a decent drama production in Skåne, linked to Sveriges Television. However, when Sveriges Television got reorganized and major departments moved to Stockholm, the existing drama production laid the ground for building the filmcluster in Skåne. The competence was already present in Malmö which facilitated the growth of different TV series and movies.

The official cluster construction started with the creation of Business Region Skåne in 2008 whose purpose was to develop Skåne's marketing in order to attract tourists and investments to the region. It is divided into four subsidiaries: Event in Skåne, Invest in Skåne, Tourism in Skåne and Film in Skåne, which all work for the same objective: strengthen the marketing of Skåne by selling, developing the region and creating job opportunities. At that time, Film i Skåne obtained money from the region and then grew slowly. They have now succeeded and built an infrastructure, they even own film studios and other facilities.

4.2.3. Government

It is vital that governments focus on the development of the film industry in Skåne, and there are four reasons for this. The first one concerns the regional economy. Indeed, film costs a lot, and thus by being involved and making sure to invest a certain amount, it is ensured that it attracts capital from many different places in the world (in the form of hotels, services, jobs etc). Region Skåne benefits from these projects. Secondly film can be considered artistically important, for example in France it is an embedded part of the culture. Thirdly, the tourism industry is crucial, creating identification in a country represents a key factor to attract visitors and this can be done through movies. And finally, movies create identity, film is one of the most consumed forms of culture and it builds the image of the place. Consequently, it is essential for Region Skåne to invest regionally in the film industry and contribute to the development of these clusters. Therefore, Region Skåne invests 420 SEK per capita per year in culture and Film i Skåne got a regional contribution of 27 MSEK in 2022.

According to almost all the people interviewed, Sweden is lacking the film discount. It consists in offering a state film discount on hotels, restaurants etc, to all filmmakers that are producing a movie in the country. The majority of European countries offer this

discount but not Sweden, which appears as a crucial issue to people working in the Swedish movie industry. Effectively, this discount represents a major factor why international productions choose to produce their movies in other countries than Sweden. However, it seems that the Swedish Government has finally accepted this discount and is going to implement it, which should represent a new turn for the Swedish movie industry.

4.2.4. Informal networks

A success factor for an actor of the cluster is about building a solid network. The most common way to hire people to work on a project is through recommendations and already established contacts. Some producers stated that they would never work with an actor they had not worked with before nor got a recommendation for. As expressed by Interviewee 8 (2022):

Film financing is a complicated thing that relies on old contacts and where to find money.

That is to say that any actor that needs financing for a project, or a team, will always go to old contacts to find what is needed.

Film I Skåne does not only play a financial role in the cluster. It is their main objective but not the only one. In fact, they also work on creating networks and establishing contacts between various filmmakers. That is done for example through filmjobb.com. They also act as film commissioners which means that when investing in a project in the region, they have to make sure the productions find hotels to stay at and locations to shoot. In addition, they have responsibility for the team's good behavior in the region. Their second mission is to create partnerships between the different actors in order to facilitate the film production as much as possible. Even post production, they will make sure that the films are seen, they create screening opportunities and disseminate the films. Consequently, their main priority is financing projects, secondly building a network that the actors of the cluster can rely on.

Whatever your role in the film business is, you have to be active, reconnect to the contacts you have, try to keep in touch (Interviewee 9, 2022).

One of the essential points of the cluster is to meet and connect with people, and then to construct a long term relationship. This requires an active role, both reaching out to new potential actors as well as sustaining already established relations. The arrangements between the different actors are contractual and are always for one project at a time, nobody uses long term contracts. Thus, it is crucial to keep good relations with all the actors to continue signing new contracts on a regular basis.

The main concepts of the cluster appear through these informal networks. It is more beneficial for all the actors to cooperate instead of restraining each other. Therefore, it is crucial to stay informed and active in the region. That way, all actors are aware of ongoing projects and their competitors' next move, they can help each other out by renting out technical equipment or studios for example. The cluster takes the form of a community.

4.2.5. Dysfunctions

Nevertheless, the operation of the cluster is surely not flawless. Therefore, a few dysfunctions have been identified by the interviewees that either the indirect participants of the clusters or the actors within it should improve. First of all, the biggest dysfunction is that the budget is limited. This prevents Skåne's cluster from developing innovative material and infrastructure and from attracting high quality producers. Thus, the government and region should invest more in the industry. Secondly, it has been opined that there is a lack of variety in Film i Skåne's film investments. In fact, the same persons have been in charge of the organization and choose which projects to invest in.

That gives them quite a lot of power and since the film industry in Skåne is quite small it is only their likes and dislikes. It could revitalize the types of projects that get funds if those decision-makers were to rotate" (Interviewee 9, 2022).

And finally, there is a shortage of film workers because there are too many projects. The movie industry is a complex environment and they are currently trying to increase the recruitment and the diversity.

5. Discussion

5.1. Clusters

According to Sölvell (2015) and Maxwell Stamp Inc (2012), clusters should follow a particular structure and be composed of a list of various actors. To begin with, we are referring back to the definition of clusters that are defined as:

Companies and institutions within a particular field that are interconnected and geographically concentrated (Porter, 1998)

which corresponds to the results from Skåne and Gothenburg. In both cases, a concentration of different actors within the movie industry has arisen in these large cities. The structure of the clusters in Skåne and Gothenburg is built as presented by Maxwell Stamp Inc (2012). There are core companies, support businesses, soft infrastructure and hard infrastructure. In addition, they both include the principal members that are put forward in Sölvell's book (2105): firms, education organizations, capital providers, public bodies, networking organizations and outside actors. Although, the actors in Skåne work on a broader level while actors in Gothenburg are more niched and specialized. The actors in Gothenburg can easily be classified in these categories of cluster members while some actors and companies in Skåne work both as a part of the core business and operate some of the support functions. This can be explained by the fact that Skåne and its film industry are smaller (financially and geographically) and hence the projects are too. The actors need to be able to adapt and manage more than one function. While the bigger cluster and productions in Gothenburg both require and give room for specialization. Thus, the members of the cluster in Skåne have chosen a more flexible specialization where they don't focus only on one single product they mass produce but adapt to demand. As we will discuss more precisely later, the actors from both clusters are complementary and need to cooperate if they want the cluster to function, they all need each other, which also leads to knowledge spillovers. To sum up, the Skåne and the Gothenburg clusters are constructed in very similar ways and according to what theory recommends.

Going back to Sölvell (2015), there exists one difference between the clusters in their degree of agglomeration. Sölvell (2015) stated that some clusters can be part of a larger agglomeration, which is the case of Skåne. As explained in the results, the movie cluster in Skåne is a part of a larger initiative to market the region and attract visitors (Business Region Skåne). On the contrary, the cluster in Gothenburg can be qualified as more isolated, focused only on the movie industry. However, the results have also shown that both types of clusters can be successful.

5.2. Building the clusters

In line with Maxwell Stamp Inc (2012) the Skåne and Gothenburg clusters started from a chance event and with governmental intervention, in this case contribution to film development and production. This created the so-called initial spark that is according to Maxwell Stamp Inc (2012) all that is needed; and with time more actors have been established. Both clusters are built upon the same idea and governmental initiative. It started with a national reaction towards violence and low qualitative/cultural movies with the premier of The Texas Chainsaw Massacre. This reaction resulted in Svenska Filminstitutet creating four regional film funds, Film i Väst, Filmpool Nord, Film i Skåne och Film Capital Stockholm. However Gothenburg and Skåne have different key actors that have helped build the cluster. Gothenburg is highly dependent on Gothenburg Film Studios while SVT and Anagram are key players in Skåne. Despite Gothenburg has been more successful as a film cluster (further elaborated below and under next heading).

One of the major differences between the building of the two clusters is how the filmfunds have chosen to operate and hence laid ground for the cluster. Film i Skåne has a broader purpose, they are supposed to market the region though film to acquire more tourism and business. Film production in Skåne is only one of many components Film i Skåne have to take into consideration. In addition, they are supposed to create opportunities for film education, showcasing, film festivals, trade shows etc. As contrast, Gothenburg and Film i Väst are solely concentrated on building the film production industry by providing funds. Gothenburg's narrow focus can be used as one part of the explanation as to why they have been more successful in creating a film cluster.

According to Porter (1998) there are four components to take into consideration when establishing a cluster strategy: choosing location, engaging locally, upgrading the clusters and working collectively. Locations have been chosen based on where there are film funds to access funding from. Engaging locally is done to a large extent in both clusters. Both formal and informal networking and continuous communication is a daily task among actors in Gothenburg and Skåne. The database in Gothenburg and Skåne can further be viewed as a common platform, a tool suggested by Porter (1998) to engage locally. Additionally, Porter (1998) promotes working collectively to provide public goods and not only letting the government provide these goods and services. This can be found through both simultaneous cooperations where actors in the industry come together to create fairs, festivals etc. Likewise thorough longer cooperations such as industry organizations. This also constitutes a way to upgrade the cluster.

5.3. Government

As stated in the previous literature and by our interviewees, the government plays an important role in the economic development of a cluster, and should even contribute to it. The film clusters in Skåne and Gothenburg are very alike in their relationship to the government, they are both very dependent on it. Both have a principal investor that is the regional film fund which gets funding from the region through tax money. In their turn these regional film funds are required to invest in movies in the aim of redistributing the same money in the region through hiring people, shooting the film, staying at hotels, eating at restaurants in the region. The money is finally reinvested and brought back to the citizens. The funds are built upon an idea of the necessity of high qualitative Swedish drama film that inspires, starts conversations and highlights culture. Since film production requires large investments and these film funds are one of the few actors investing money in film production, both clusters are heavily dependent on the government. This opposes Porter's (1998) view about the government's role in a cluster. According to literature, the government could be an important support function, present to ease and support the operation of the cluster. Although the government should not build, directly take part nor sustain the cluster. It can be questioned whether the government plays a reasonable supporting function or if the clusters are too dependent on it. The government is more or less keeping these clusters afloat, which might be necessary but not optimal.

Even if both clusters are dependent on and supported by the government, there is an important difference in the size of the clusters and the level of financial support. As explained before, the cluster in Skåne is much smaller than the one in Gothenburg. The size variation can partly be explained by a big city phenomena. A bigger city results naturally in more business and actors and a more widespread industry. Film i Skåne has received remarkably lower contributions than Film i Väst. For the year 2022, Film i Skåne got a regional contribution of 27 MSEK while Film i Väst got 106 MSEK. To put into context there are about 1,34M citizens in Skåne and 1,71M citizens in Västra Götaland. The numbers from the result show that the investment per capita is almost twice as high in Gothenburg compared to Skåne. On top of this, Film i Skåne's contributions should also suffice to the film cultural part. That is to say kids and youth, film education, showcasing of film, festivals, trade shows and general marketing of film culture. In Gothenburg this part has been handed over to Västra Götalands Kulturförvaltning, causing an even bigger economic gap. This is a result of regional politics. In general, Västra Götaland puts aside more money for arts and culture than Skåne does. Due to many regional researches and surveys there is a higher conviction among politicians in Västra Götaland that film brings money, PR and jobs to the region. Data shows Västra Götaland's investments bring a return of 4,5 times the initial investment. There is also a general idea that film is one of the most valuable and appreciated art forms in the region, hence money has continually kept being invested. Further Film i Väst has been able to coproduce some appreciated and successful movies

which have been nominated in great international galas, thus securing their continued financing and making it possible to invest in other successful films. This way a positive snowball effect has been created. The politicians have also been a determinant factor. The regional finances are distributed to healthcare, public transport and culture. In order to receive a larger budget for culture, one thus has to argue to cut the healthcare or public transport contributions. In Västra Götaland there has been a history of skilled politicians with passion for culture hence they have been able to secure a large share of the regional finances, high cultural investments becoming the norm in the region.

5.4. Informal Networks

As it has been explained, informal networks are a key factor for a cluster to function successfully (Dahl and Pedersen, 2004). We can observe in the interview results that building and perpetuating relations in the cluster is crucial for all the actors. Both the clusters in Gothenburg and Skåne are small concentrations where all the members know each other and informal networks are of enormous importance. Contacts and recommendations are everything since the various actors are hardly able to participate in different projects without a network. All projects are based on recommendation, when an actor has an idea, one will engage the people they already know and trust to ensure the quality of the project. This replicates the idea of Dahl and Pedersen (2004) informal networks, where most information and relations is built on informal networks.

According to Sölvell (2015), the quality of the cluster depends on the quality of the interactions between its different members that determines the level of dynamism of the cluster. Sölvell (2015) stated that the cluster offers an environment in which different resources and capabilities are constantly shared and rearranged to maximize its efficiency. The results from the interviews have confirmed Maxwell Stamp Inc's (2012) statement that one actor seldom has all resources, knowledge and money to innovate on a larger scale.

As described earlier in this study, when a movie production occurs in one of the two regions, all different types of filmmakers and outside actors are hired. For instance, if some material is lacking for the production, two competitors often need to complement each other to deliver all needed material, which shows the importance of contacts.

Interviewee 2 (2022) even explained that it is part of his job to travel and make contacts around the world if one wants to get hired in interesting projects. When he is on a trip, he always makes sure to meet new people and start a good relationship with them by inviting them to dinner for example. Thus mingling is essential to build an informal network. But that is not only true abroad but also within the region. As explained, these scouters' job is to create partnerships between the different actors in order to facilitate the film production as much as possible. Therefore, they should have good contact with the international production firms to attract them but also with local restaurants, hotels etc in the region so that they can propose partnerships to the different film productions.

However, referring to Maxwell Stamp Inc (2012) and to the four different activities that are key factors to successful clustering on the picture below, one can see that all these are based on informal networks:



Source: Maxwell Stamp Inc, 2012

The actors of the clusters in Skåne and Gothenburg are aware that the contacts are essential to succeed in the film industry and that creating a large network within the cluster is crucial for its efficiency. Consequently, the clusters in Gothenburg and Skåne have now become huge networks where information and knowledge flow freely, and where all members are cooperating and helping each other out.

5.5. Dysfunctions

Söllvell (2015) mentions pitfalls in clusters in the form of gaps between actors. With gaps comes a less dynamic and innovative cluster. In the case of both Gothenburg and Skåne there are not any major gaps, overall there is good coordination and communication because of the nature of the industry (which requires many actors to constantly keep contact and work together). However, some small gaps have been identified and create inertia in the industry preventing knowledge and innovation to flourish at its peak. The first one can be classified as a Firm-to-Research gap. There is little research done and mainly controlled and operated by the government, hence there is a gap between public research and private actors. Although the private actors are involved in research, it is often separated from the public research preventing optimal cluster research. The Firm-to-Education gap is another gap, however based on the same issue: the public is the major driving force but very much separated from the private initiatives. The Firm-to-Capital gap is also very obvious. Due to the harsh control and lack of capital in the industry, there is a long and bumpy road in securing finances for a firm. This prevents smooth operations and flow in the clusters. This is also a matter of a Firm-to-Public actors gap as a result of the public actors supplying and controlling the money. As previously tapped into, the extensive involvement of the government in the

clusters in Gothenburg and Skåne creates gaps and challenges for the actors in the cluster.

A key component in clusters is the presence of competition, which fosters innovation and development. According to Porter (1990) there must be competition in order for a cluster to function properly and to attain its competitive advantage. Nonetheless there seems to be little to no competition in practice in Gothenburg and Skåne. This is explained by the actors in the cluster as a result of a small industry with few actors and much cooperation. With that being said the ongoing productions include more or less all actors. Another explanation brought up was the artistic approach. Film creation is an art form. Everything from clothes, acting, producing to cutting is highly individual and can both separately and as an entity be classified as work of art. Since they all have different ways of expression it is hard to compete in the true economical point of view which might explain the perception of low competition in the clusters.

As mentioned in the previous paragraph, inventions and new ideas are one of the fundamental blocks in clusters. However, there are tendencies of stagnation in this department in both clusters. This can be explained by the low turnover of people working in the industry. The industry is considered relatively small and hence there are challenges in getting new talent (even though they actively work with these issues in the clusters). As for the public actors, such as Film i Väst and Film i Skåne, they have had pretty much the same board for years. This is an even bigger issue because of their extensive power and combining this with long and conservative governmental processes. Owing to Skåne being a smaller cluster in comparison to Gothenburg, Skåne is affected to a higher degree, although both clusters are highly affected by this problem.

6. Conclusions

The Swedish film clusters in Gothenburg and Skåne are mainly built according to theory. They are an agglomeration of geographically concentrated firms from the film industry, where the actors can be categorized into the four different groups with different functions. Both clusters are built based upon a small film industry but mainly originate their present scale from a governmental initiative, the film funds. These film funds were created in order to market Region Skåne and Gothenburg and attract visitors and business. The clusters primarily operate thanks to the government and the informal networks. In theory the government should contribute to and support the development of the clusters, however in practice it appears as a crucial actor driving the clusters. As for informal networks, the clusters' success is based on the quality of the relationships between the different actors within them. Knowledge and information flow freely owing to all actors being highly engaged. The largest dysfunction is the Firm-to-Public actors gap, the firms are highly dependent on the government yet they are not synergetic. As the theory says this causes inertia in the clusters preventing them from reaching their purpose and utopian state. This can be made very clear when the clusters are stagnating which is the opposite of innovation, the true core of clustering.

The biggest similarity between the Skåne and the Gothenburg clusters is their construction based on informal networks and governmental initiative. The most important difference between them is their level of success. Gothenburg is larger both financially and geographically which leads to the production of more well-known and widespread movies. In extension this difference is due to various political views.

6.1. Limitations and suggestions for further research

It can be concluded that the filmfunds play a major role since financing is extremely hard. Although, major streaming platforms such as Netflix, Cmore, Viaplay etc are growing and more evolving into creating their own content, in other words vertically integrating and absorbing other parts of the film industry. Hence the film industry is at a crossroad where the future is uncertain. How will these major companies affect the value chain and how will the clusters be affected? Will the clusters adapt or resolve? This is a very present issue with huge importance which this paper did not have the ability to explore further, thus it is a limitation and an area for further research. To add another dimension and extend our research it would be interesting to investigate the other film clusters in Sweden, Stockholm and Norr. Further the cultural political aspects that are of enormous importance could be researched more extensively. The scope of the research did not allow for deepened research on the political background, thus opening up for further research.

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8. Appendix

8.1. Appendix 1: Interviewees

Interviewee	Type of company/ organization	Role	Region
Interviewee 1	Film i Väst	Producer	Gothenburg
Interviewee 2	Film i Skåne	Top level position	Skåne
Interviewee 3	Film i Skåne	Top level position	Skåne
Interviewee 4	Gothenburg Filmstudios	Top level position	Gothenburg
Interviewee 5	SF Studios	Producer	Gothenburg
Interviewee 6	Entrepreneur/multiple companies	Entrepreneur/Producer	Skåne
Interviewee 7	Cinenic film	Top level position	Gothenburg
Interviewee 8	Freelancer/Independent	Entrepreneur	Skåne
Interviewee 9	Entrepreneur/Multiple companies	Entrepreneur	Skåne
Interviewee 10	Västra götalandsregionens utvecklingsnämnd	Region developer	Gothenburg

8.2. Appendix 2: Interview questions

Hur går det till praktiskt att skapa en film? Hur går rekryterings och upphandlingsprocesser till?

Hur ser det ut att skapa en film från idé till färdig produkt?

Vilken roll har ni i området/ i filmskapandet och i området?

Hur kan filmindustrin i Skåne/Göteborg förbättras/utvecklas?

Hur är klustret i Skåne/Göteborg uppbyggt? Hur ser det ut? Är det ett publikt eller privat initiativ?

Varför har ett kluster skapats i just Skåne/Göteborg?

Hur samordnas processer?

Hur faciliteras filmproduktion?

Vilka samarbeten finns i branschen och hur är de utformade?

Vad finns det för olika komponenter i ett kluster, vilka är obligatoriska, mer drivande etc?

Hur utnyttjar man som aktör ett kluster?

Varför väljer producenter Göteborg/Skåne?

Vilka aktörer finns i klustret? Varför dessa? Varför inte andra? Vilka är nyckelspelare?

Vad har ni för relation till andra aktörer i filmbranschen?

Hur ser konkurrensen ut i branschen?

Vad har ni för konkurrenter - vilken relation har ni till dem?

Hur avgränsas/samverkar de olika aktörernas område?

Hur etableras nya aktörer i området?

Kan man se en ökad produktivitet av fler aktörer? Har produktiviteten ökat med tiden klusterna växt fram?

Hur får ni era kunder?

Hur jobbar ni med utveckling av klustret?