The Potential in MOOCs

-A study of reciprocity, symbolic and social capital via MOOCs and a discussion of MOOCs as a disruptive technology

Master Thesis by: Troels Storm Olin
Studentnumber: TO87644
Supervisor: Lisanne Wilken
Aarhus University
March 2015
Abstract
Massive Open Online Courses (MOOCs) has become quite a buzzword within the field of education. MOOCs are currently offered by universities worldwide and the popularity of MOOCs, both from universities offering them and from persons taking them has also called for attention by media and scholars. There is therefore both a positive and a critical discourse and a general hype surrounding MOOCs at the moment. By looking at this hype via a model called Gartner’s Hype Cycle, it is argued that the rise in critical MOOC literature may be explained by the general cycle of hype, surrounding new technologies and inventions, such as MOOCs.

In the academic field there seems to be a lack of literature concerning the strategic and political use of MOOCs in different contexts. Through three case studies, it is therefore the aim of this thesis to explore the following: In what ways do MOOCs present a potential regarding the fulfillment of strategic goals and policies and how could it potentially disrupt the education market as we know it?

By applying the theory of gift giving and symbolic capital to the case of two Danish universities, currently offering MOOCs, it is argued that MOOCs present a potential for universities. They do so in the way that they can be used to attract students and to build a stronger international brand, and thereby provide the university with symbolic capital. But there is also a risk that the universities may lose symbolic capital if the MOOCs are not successful. Further, it is argued that MOOCs presents a potential in relation to attracting foreign students to Denmark, which is a policy goal for the Danish government.

Secondly, by applying the theory of social capital to a case study of a regional MOOC project, it is argued that MOOCs present a potential to lift the studied region as whole. But there is also a risk that the region may lose social capital, if the MOOC project is not successful. Further it is argued that MOOCs therefore also can be used by the EU as a policy tool in their education- and regional development policy.

Thirdly, by applying the theory of disruptive technology to MOOCs, it is argued that MOOCs have a potential to disrupt the education market within a number of fields in the future. Further, by applying a model called Catch the Wave, to the case of a faculty at a Danish university, it is argued that the model is useful to remind institutions interested in MOOCs that there are certain strategic considerations that must be made, before a university decides to start offering MOOCs. However it is also argued that the model should not be used rigidly, rather it shall be seen as a strategic framework.
The Potential in MOOCs

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Part I: Introduction and Background

Chapter 1: Introduction

"The shimmery hope is that free courses can bring the best education in the world to the most remote corners of the planet, help people in their careers, and expand intellectual and personal networks" (Pappano, 2012).

Since the term Massive Open Online Courses (MOOCs) was firstly used in 2008 it has become quite a buzzword within education and educational research (Baggaley, 2013, p. 371). Today MOOCs are offered by several universities through several platforms around the world. The acronym MOOC has even made it to the Oxford Online dictionary (Oxforddictionaries, 2014).

MOOCs can be defined as *massive* because everyone can join them and because there, technically, is no limit to how many students that can sign up for the same MOOC. They are *open*, because everyone can sign up, regardless of pre-requisites and finances and all it takes is an internet connection. They are *online* because all the teaching, lectures, quizzes, tutorials, debates etc. is taking place online. Finally they are actual *courses* because they are offered by recognized learning institutions (OpenupEd, 2014).

As seen in the opening quote from Laura Pappano there are those who are positive towards MOOCs and their potential, but there are certainly also those who are more neutral or even negative towards them (Haggard, 2013, pp. 21-23).

Further, as in most scientific fields, the desire to classify new species also applies to MOOCs. One of the more recent theoretic discussions surrounding MOOCs therefore seems to be that of the nature of MOOCs. For what is a MOOC exactly? How can it be classified in accordance to the known theories? Is it all just hype, or is it something that could change the world forever? Is it just packaging over content, in the way that everything in a MOOC already existed in e-learning, or will it revolutionize the way we approach higher learning in the future? In general, it seems that those who are interested in MOOCs are looking for answers to the fundamental questions of what they are and what they do. In other words, what is the nature and potential in MOOCs?
A larger part of the current existing literature is mostly concerned with the pedagogical impact of MOOCs, rather than looking at how MOOCs can be used strategically and perhaps politically (Liyanagunawardena, Adams, & Williams, 2013, p. 219). This, along with the fact that the academic MOOC-field is rather new, has led Jolie Kennedy to conclude that “There are significant opportunities for pedagogical research, philosophical and theoretical development, design and facilitation adaptations, and implementations in varied contexts” in her 2014 MOOC literature review (Kennedy, 2014, p. 11).

Apart from just being offered as online courses by universities world-wide, MOOCs have also been used by various other actors, as a tool for reaching strategic and political goals. One of them is the European Association of Distance Teaching Universities (EADTU), which has “open education and MOOCs” as a policy area (EADTU, 2014) and which has created a MOOC platform called OpenupEd, in cooperation with the European Commission. The aim of this European MOOC platform is to “reflect European values such as equity, quality and diversity” (OpenupEd, 2014).

Another example is the Danish government, who in their report "Denmark - an attractive student destination" states that "Online courses are an obvious option for giving international students outside Denmark a taste of how a Danish study programme operates. The government will therefore work to disseminate and develop digitalization of study programmes.” (Regeringen, 2014, p. 4).

So, it seems that MOOCs are already being used strategically and politically in varied contexts. Yet there seems to be a gap in the literature about the actual role of MOOCs in this, as also observed by Kennedy (Kennedy, 2014, p. 11).

A further exploration about this aspect of MOOCs, is therefore necessary, in order to create more knowledge about the potential of it, in areas outside the pedagogical discussion. Knowledge that is important for universities, organizations or academics that are interested in MOOCs, in order to successfully navigate in this “brave new world of education”.

1.2 Problem statement

It is therefore the aim of this thesis to explore and discuss:

In what ways do MOOCs present a potential regarding the fulfillment of strategic goals and policies and how could it potentially disrupt the education market as we know it?
In order to narrow down and focus the scope of the thesis, it is necessary to break the problem statement into three cases:

1) As stated above, the Danish government has mentioned MOOCs in their 2014 report (Regeringen, 2014), and further three Danish universities now offer MOOCs via external platforms (Coursera, 2014). This makes it interesting to look at: In what ways do MOOCs present a potential to benefit Danish universities and how can they at the same time help to fulfill specific Danish government policies?

2) The European Commission has supported the MOOC platform OpenupEd, but they have also funded a MOOC project made by University College Zealand, in which the aim is to lift the region of Zealand via MOOCs (Gynther, 2013). This makes it interesting to look at: In what ways do MOOCs present a potential to lift a region and at the same time help to fulfill specific EU policy goals?

3) One of the more current trends in MOOC literature is to discuss MOOCs in relation to a theory called disruptive technology, a discussion which implies that MOOCs have a potential to disrupt the education market (Horn & Christensen, 2013). This discussion presents another interesting aspect of the potential in MOOCs. The third and last case will therefore look at: In what ways do MOOCs present a potential to disrupt the education market and how should they be approached by a prospect learning institution?

What these cases have in common, is that they all three concerns the use of MOOCs, but in different ways, which combined can give a broad picture of the nature of and potential in MOOCs.

1.3 Aim of Thesis

The aim of the thesis is to contribute to the discussion of the ways MOOCs offer a potential as a strategic and policy tool. The aim is thus not to generalize or conclude, but to explore ideas and arguments. The research shall thus be seen as analytic and the aim is to present arguments and ideas, developed from the analyses of the cases, which can contribute and be added to the current academic discussion. Via the three cases it is thus the ambition to present a discussion of the strategic, political and disruptive potential in MOOCs.
1.4 Structure

Overall this thesis can be divided into two parts. The first part is the introductory part which covers, the introduction and background for the theme, the second part includes the three case studies. These parts are then divided into chapters. The rest of this chapter (chapter 1), will describe and argue for the research approach and design. Chapter 2 will cover the history of MOOCs, with focus on the main providers of MOOCs and with a comment on who is taking MOOCs. Chapter 3 is a literature review, where a range of articles that are representative for the main arguments of the MOOCs supporters and the MOOCs critics will be discussed. Lastly in chapter 3 it will be attempted to illustrate the MOOC hype via a model called Gartner’s Hype Cycle.

Part two will include three different case studies. The first case (chapter 4) is an analysis of what the potential are in MOOCs for universities and how there may be a potential in MOOCs when it comes to using it as a policy tool for the Danish government, the theories used for this analysis are gift giving and symbolic capital theory.

The second case (chapter 5) will try to explore the potential in MOOCs when it comes to lifting a geographic region and if MOOCs present a potential in functioning as a policy tool for the EU. The theory applied to this case is mainly the theory of social capital.

The third and last case (chapter 6) will then explore the nature of MOOCs and its potential, when it comes to how MOOCs may disrupt the education market in the future, by using a theory called disruptive technology. This case study will end in a discussion of how universities should then approach MOOCs, according to a theory called Catch the Wave.

Chapter 7 will be a conclusion of the findings from the case studies and an attempt to answer in what ways MOOCs present a potential for universities, regions, the EU and the Danish government and for the education market in general.

Below is an illustration of the structure of this thesis.
1.4.1 Thesis Structure Overview

![Figure 1: Thesis Structure Overview]

1.5 Theoretic Position

In this section the scientific approaches of the overall choice of theories described in this thesis will be discussed. This chapter will however not go in depth with why each individual theory is well suited for the respective analysis they are used in, this will be argued for in each description of the theory from chapters 4-6.

In the description of the theory of gift giving, which is applied to a discussion of symbolic capital and reciprocity in MOOCs, the works of Pierre Bourdieu, Marcel Mauss, George Simmel are mainly discussed (Bourdieu, 1986) (Mauss, 1967) (Simmel, 1950).

Simmel, Mauss and Strauss can all be considered structuralists in some form according to Mark Schneider (Schneider, 2007), they therefore believed in “the causal force of the relations among elements in a system or of emergent properties of their patterning” (Schneider, 2007, p. 4856).
Pierre Bourdieu on the other hand, who is also described in the section of social capital in chapter 5, described his work this way:

“If I had to characterize my work in two words, that is, as is the fashion these days, to label it, I would speak of constructivist structuralism or of structuralist constructivism” (Bourdieu, 1989, p. 14)

By structuralism, which is probably what shines through the most in Bourdieu’s work applied in this thesis, he refers to that there exist “objective structures independent of the consciousness and will of agents, which are capable of guiding and constraining their practices or their representations.” (Bourdieu, 1989, p. 14).

Constructivism then relates to the idea that social structures are constructed in a twofold social genesis (habit and action) (Bourdieu, 1989, p. 14). This is however related to a theory that is not discussed further in this thesis and thus will not be described further.

Within gift giving, the concept of reciprocity is mainly described through the ideas of Marshall Sahlins, Aafke Komter and Jörgen Skågeby (Sahlins, 1972) (Komter, 2007) (Skågeby, 2010). Sahlins has called himself “substrativist” (Cook, 1974, p. 355) which is a view that is within the field of economic anthropology, it is explained by Scott Cook as:

“The view that the economy, as a function of society, provisions society by maintaining social relations or the social structure regardless of the degree to which the material needs of a given population are satisfied” (Cook, 1974, p. 355).

As for the theory of social capital, which is used to analyze a regional MOOC project, the ideas of Jason Putnam and Coleman are discussed, along with Bourdieu (Putnam, Making Democracy Work; Civic Traditions in Modern Italy, 1993) (Coleman, 1988).

Putnam are according to Martti Siisiäinen “carrying on theories of pluralism or functionalism” (Siisiäinen, 2000, p. 10), because he is focusing on the organized interests, that makes up social structures in society, such as interest groups, voluntary groups and government bodies (Siisiäinen, 2000, p. 23). Coleman’s theory on the other hand is very utilitarian (Adams, 2006, p. 2) meaning that he believed actors in a society will always try to use their resources to achieve their own interests (Coleman, 1988, p. 101).
The third analysis is mainly concerned with the theory of disruptive technology and “Catch the Wave”, by respectively Clayton Christensen and Joseph Bower & Clayton Christensen (Christensen C. , 1997) (Bower & Christensen, 1995). These theories, which are related to classic management theories, can be used as a tool and entrance to an exploratory qualitative case study, where the analysis and arguments reached through applying their theories, are along the line of social constructivism.

Though there is no shared overall scientific paradigm between these theories they do have one thing in common in this thesis, which is that they are not used in a positivistic way. The theories are thus chosen from their ability to function as an analytic tool in regards to the three case studies, rather than being chosen from the overall scientific paradigm they belong to.

However, when it comes to analyzing the impact and potential of new technologies, such as MOOCs, this thesis will mainly be positioned around social constructivism. This implies that the development of a new emerging technology is perceived as being influenced by social and cultural factors, rather than happening naturally (Wenneberg, 2002, p. 74). So when discussing the effectiveness and impact of a new technology, as will be done in this thesis, the discussion will consider cultural and social means as having an influence on how a new technology is perceived.

1.6 Analytic Position
In this section it will briefly be clarified how this thesis positions itself, in relation to the analysis and according to the current discussions in MOOC literature. According to Stephen Haggard, there are two paths within the research of MOOCs, researchers can either see MOOCs from the perspective of universities (i.e. what is in for the universities) or from the perspective of MOOC takers (i.e. what is in it for the students) (Haggard, 2013, p. 6). Within the university perspective, there further seems to be two main focuses in the literature; one which can be called the strategic focus, includes the strategic potential in MOOCs in regards to branding, recruitment of students and perhaps the fulfillment of internationalization goals. The second focus within the university perspective can be called the explorative pedagogical and learning focus. This involves the study and curiosity of e-learning and blended learning and the focus is to discuss the best way to teach and learn, so that the students and MOOC takers can get the best possible learning outcome from the MOOCs (Haggard, 2013, p. 54).
This thesis will explore MOOCs from the perspective of the universities rather than the students, and it will focus on the strategic potential in MOOCs, rather than the pedagogical focus. This is because it is from this perspective that there is the biggest lack of research and academic literature. This focus is also reflected in the choice of the three cases.

Furthermore, there is an ongoing academic debate in relation to different learning approaches and learning theories in regards to MOOCs some of these includes the mentioning of two learning theories; connectivism and social constructivism and a discussion of whichever may provide the best potential for learning (Haggard, 2013). When this thesis refers to social constructivism, as done in the previous chapter, it is referring to the scientific research method, not the learning theory.

Even though these two have some underlying similarities in their approach, they differ widely in how they can and should be applied. Therefore it is important not to confuse the two when reading this thesis. One is a research approach the other is a learning theory.

In most studies concerning the short history of MOOCs some scholars are dividing the MOOCs in different waves. One wave of MOOCs is referred to as connectivist MOOCs (called cMOOCs) and another wave is referred to as content based MOOCs (called xMOOCs) (Haggard, 2013, p. 54). For this reason some articles are claiming that one should be very aware of using MOOCs as all overall term, since there are many differences in how MOOCs are offered. Others, such as Stephen Haggard are however, arguing that this differentiation between the different MOOCs in the literature, are breaking down or blurring (Haggard, 2013, p. 54).

Nevertheless these waves are basically related to the learning models and pedagogy behind the courses and they are mainly looking into the learners’ point of view, not the universities’ point of view. A further distinction of the different kinds of MOOCs is there not relevant for this study, since this thesis will focus on the universities’ point of view and a more overall discussion of MOOCs as a phenomenon.

This thesis does however recognize that the strategic outcome may be dependent on the actual format of the course. But this is a matter of technicalities and learning theory, which is less relevant in a discussion of the potential in MOOCs and more related to a discussion of the actual function of MOOC.

MOOCs are in this thesis therefore referring to massive open online courses, in any form, that are offered by learning institutions via any platform, the different types of MOOCs will thus not be considered in the analysis.
1.7 Research Design

In order to explore the topic and to better be able to discuss the potential in MOOCs this thesis will use a qualitative research method, using a case study with in depth interviews and an expert interview. This section will account for the choice of methods and how they will be used according to the three cases.

1.7.1 Qualitative Case Study

The reason why a qualitative method will be used in this thesis is because it enables an open ended exploration and analysis (Cooper & Schindler, 2003, p. 3), which is necessary in order to explore the potential in MOOCs in different contexts, since little is known about this field. The qualitative method further enables a researcher with the possibility to explore new ideas and arguments (Cooper & Schindler, 2003, p. 5), this makes it well suited for the purpose of this thesis. So, the main reason to use a qualitative method to explore this field is because of the open ended and explorative nature of the problem statement. It would not have been possible to explore this in the same way through e.g. a quantitative approach (Cooper & Schindler, 2003, p. 151).

1.7.2 Interviews

For the research there will also be used in depth interviews with selected representatives from relevant organizations. The interviews have all been semi structured, the reason why they have been semi-structured and not completely open, is that the informants have been chosen because it was perceived that they had special knowledge about the field and there where therefore some topics that was crucial to get covered in the interviews. They have not been completely structured, because the flexibility a loosely structured interview guide gives and the open ended questions one can ask with the semi structured interview, was the most useful for the qualitative and explorative nature of the problem statement (Ritchie & Lewis, 2009, p. 111). Who the interviewees are and why they were selected will be elaborated in the respective chapters they appear in (chapters 4-6).

1.7.3 Expert Interview

To discuss the findings in the three cases an expert interview will be used to reflect on some of the ideas and arguments that has been developed through the case studies and interviews. According to Bogner, Littig and Menz there are three main different uses of an expert interview (Bogner, Littig, & Menz, 2009, p. 46). There is the explorative expert interview, where you simply use the expert to get knowledge on a less investigated field to explore what the expert knows and to systematize knowledge and develop hypotheses. Secondly, there is the systematizing expert interview, where
the aim is to reconstruct and harvest the experts’ knowledge and to complement this with data from other methods. Lastly, there is the theory-generating interview, where the aim is to develop a typology or theory, based on a reconstruction of an experts’ implicit knowledge (Bogner, Littig, & Menz, 2009, p. 46). So according to them, what a researcher must consider before conducting the expert interview is if the purpose is solely exploratory, if it is to systemize already existing knowledge or if it is to develop and generate theory, based on the experts’ knowledge. Within these three overall definitions the expert interview in this thesis is used to generate knowledge and to explore existing knowledge, gained from literature review, case studies and in-depth interviews. Therefore, in this project, the expert interview can be categorized somewhere in between the explorative and systematizing interview.

Chapter 2: Background

In this chapter the history of MOOCs, with focus on the main providers of MOOCs and a comment on who is taking MOOCs, will be described. Before moving on to the analysis, a basic understanding of the development of MOOCs is necessary, because MOOCs covers a rather wide field, as will be shown with the three different case studies later on.

2.1 The Brief History of MOOCs

This section will give an overview of the history of MOOCs, including the major platforms, the geographic spreading of MOOCs and a description of who is taking MOOCs. The geographic account will be focused on North America, Europe and Denmark. North America is relevant because this is where it all started and because most of the MOOC literature is from there, Europe and Denmark are included because they are geographically relevant for the cases that will be analyzed later on.

It is generally believed that the term MOOCs was firstly used in Canada in 2008, where the word was used to describe a pedagogical experiment by employees at Manitoba University (Liyanagunawardena, Adams, & Williams, 2013, p. 203) (Baggaley, 2013, p. 371). Since then, MOOCs have gotten a lot of attention in North America, but it was actually only 2.6 percent of all higher learning institutions that offered MOOCs in 2012, a number which has doubled to 5 percent in 2013, according to the annual report “Grade Change - Tracking Online Education in the United States”. The report therefore argues that MOOCs have gotten “far greater attention than their
actual impact on US higher education institutions” (Allen & Seaman, 2014, p. 23). This attention vs. impact imbalance further makes it interesting to look into the hype surrounding MOOCs, as will be done later in this chapter.

2.1.1 Who is Offering MOOCs

Universities offering MOOCs often do so via external partners (also referred to as MOOC platforms), which provides the technological solution (Baggaley, 2013, p. 368). If a person then wants to take a MOOC, it is often required to sign up (for free) via one of the platforms, and from there it is possible to browse the numerous MOOCs offered by numerous universities.

The three major North American platforms are considered to be edX, Coursera and Udacity (Baggaley, 2013, p. 369). Udacity was founded in February 2012 by a Stanford University professor. Coursera was launched in April 2012 by two other Stanford professors and edX was launched in May 2012 in cooperation between Harvard University and Massachusetts Institute of Technology (MIT) (Baggaley, 2013, p. 369).

One other actor that is worth mentioning is Khan Academy, which offers “A free world-class education for anyone anywhere” (Khan Academy, 2014). They do so via lectures within a range of subjects that are published on YouTube, but it is not possible for external universities to make partnerships with Khan Academy and further, Salman Khan, the founder of the Khan academy has in an interview argued for that what the Academy offers should not be considered MOOCs. Khan Academy is therefore generally not considered a traditional MOOC platform, even though its pioneer status and importance for the development of MOOCs in general should not be neglected (Akanegbu, 2013).

The first MOOC platform to be launched outside North America was the UK-based Futurelearn, initially only offering courses from UK universities (Gaebel, 2013), but now with university partners from all around the world (Futurelearn, 2014). At a transnational EU level, The European Commission has funded the before mentioned European wide MOOC platform OpenupEd, which was launched in April 2013 and which offers courses from European universities (OpenupEd, 2014).

In Denmark, the Danish Technological University (DTU) was the first university to offer MOOCs via an external platform, but actually it was university of Copenhagen who firstly signed an

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1 Salman Khan explains that the difference is that whereas MOOCs are a transplantation of a regular university course with a fixed start and end date and where you move forward in a cohort, Khan Academy is more on-demand based (Khan, 2013)
agreement with Coursera about MOOCs, however DTU was the first to actually develop and start offering the MOOCs (Kokkegård, 2013), also Copenhagen Business School (CBS) now offer MOOCs, as the third Danish University (Koldby, 2013). To give an overview, below is a table showing the three MOOC offering Danish universities and how many MOOCs they currently offer and through which platform (Study in Denmark, 2014) (Coursera, 2014).

<table>
<thead>
<tr>
<th>University</th>
<th>Number of MOOCs</th>
<th>Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Copenhagen (KU)</td>
<td>8</td>
<td>Coursera</td>
</tr>
<tr>
<td>Danish Technological University (DTU)</td>
<td>2</td>
<td>Coursera</td>
</tr>
<tr>
<td>Copenhagen Business School (CBS)</td>
<td>3</td>
<td>Coursera</td>
</tr>
</tbody>
</table>

Table 1: Danish Universities offering MOOCs

2.1.2 Who is Taking MOOCs
As stated earlier there seems to be two ways of viewing MOOCs, either through the view of the persons taking MOOCs or through the view of the universities offering MOOCs and, as argued, this thesis will look at MOOCs from the perspective of those who offer MOOCs. But the reason why a section of who is taking MOOCs is yet relevant for this thesis is because, the data showing the demographic background of those taking MOOCs also serves as a argument for the discussion of the potential in MOOCs and its potential to revolutionize education.

Many of the MOOC platforms, such as Coursera and edX, do not require any demographic information from a person when they sign up. Therefore it is hard to give a total conclusion on the demographics of MOOC takers. This has therefore also been a challenge for those who have yet attempted to do so (Christensen, 2013) (University of Edinburgh, 2013) (Ho, 2014). However, a few separate surveys have been made all reaching the somewhat same conclusion, which then indicates some denominations of the demographics of an average MOOC taker. One of these surveys is a joint report between MIT and Harvard, which outlines a wide range of statistics from the first year they offered MOOCs (2013). The aim of the report is to “describe the registrant and course data provided by edX” (Ho, 2014, p. 4), though this data provided by edX does not include socio-economic data. The report concludes that; The most typical course registrant is a male with a bachelor’s degree who is 26 or older; however, this profile describes fewer than one in three registrants” (Ho, 2014, p. 2).
Another study, that also reaches the somewhat same conclusion, is from an online survey of those enrolled in MOOCs offered by University of Pennsylvania via Coursera (Christensen, 2013). This study concludes that *The findings of this study indicate that MOOCs are not reaching high numbers of less educated individuals in developing countries* (Christensen, 2013, p. 6) and further that "*those without access to higher education in developing countries – are conspicuously underrepresented among the early adopters*” (Christensen, 2013, p. 8). Furthermore, a study made by the University of Edinburgh concludes that the majority of their MOOC takers have a university degree when they enroll in a MOOC (University of Edinburgh, 2013, s. 17).

Thus there seems to be a tendency in the published data on MOOC takers that they are educated and from the developed countries.

In the next section the literature on MOOCs will be further discussed, to establish an understanding of how MOOCs are generally perceived and to illustrate the development of the MOOC hype.

**Chapter 3: Literature Review and MOOC Hype**

In order to better be able to discuss the potential in MOOCs it is also necessary to establish and understanding of how MOOCs are perceived by the different actors, media, academia, universities and MOOC takers, and how this perception may have changed over the years. In order to do so, this section will look into some of the existing literature on the field, and discuss how MOOCs and their potential are framed, from respectively the positive and the more critical MOOCs articles.

In the review and framing discussion, there will be included mainly academic published articles, but also main stream media articles and blog posts.

One does not need to look very far to find very positive or very critical statements on the potential in MOOCs, but one relevant observation though, regarding the positive writings on MOOCs is, as phrased by Sir John Daniels, that they include “*thinly disguised promotional material by commercial interests and articles by practitioners whose perspective is their own MOOC courses*” (Daniels, 2012, p. 2). Where possible it will be commented if the author of the source is an obvious stakeholder, however the opinion should not be totally ignored or neglected for that reason.

The below review shall not be seen as a thorough systematic literature review, but rather it shall be seen as a framework for understanding the arguments from both the critics and the MOOC
supporters. The purpose in the search for articles has therefore been to find articles, blog posts and academic articles via search engines and library databases, which present arguments that seem to represent either the critics or the supporters, in general.

The structure of the review is inspired by Haggard (Haggard, 2013) and Liyanagunawardena, Adams and Williams (Liyanagunawardena, Adams, & Williams, 2013) who both present a rather thorough, quantitative and neatly systematized MOOC literature review.

In the next section the literature will therefore be discussed in accordance to if their overall position is positive or critical.

### 3.1.1 Positive Literature

From the more positive articles, the main arguments are that MOOCs will revolutionize not only education but also society, as Haggard observes from the positive articles he has identified: “Positively-spun press articles hail MOOCs as the hi-tech engine of a transformative revolution that will remake education as a highly engaging, open and low cost activity.” (Haggard, 2013, p. 7).

Further, quotes like this one from Coursera founder Daphne Koller and Thomas Friedman emphasizes the revolutionary potential that the most positive MOOC defenders sees in MOOCs.

“Amazing talents can be find anywhere, maybe the next Albert Einstein or Steve Jobs is living somewhere in a remote village in Africa, and if we can offer that person and education they would be able to come up with the next big idea and make the world a better place for all of us” (Koller, 2012)².

“Nothing has more potential to lift more people out of poverty — by providing them an affordable education to get a job or improve in the job they have. Nothing has more potential to unlock a billion more brains to solve the world’s biggest problems. And nothing has more potential to enable us to re-imagine higher education than the massive open online course, or MOOC” (Friedman T. L., 2013A).

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² Daphne Koller is a Stanford Professor and co-founder of the MOOC platform Coursera and should therefore be considered a highly subjective stakeholder. It can be argued that she represents the extreme end of the MOOC supporters. However, her influence is noticeable, and she even made it to Time Magazine’s list of the world’s 100 most influential persons in 2013 (Emanuel, 2013)
In relation to the learning outcome in MOOCs, the general argument is that MOOCs provides a potential in giving MOOC takers a good learning outcome, an example of this argument is Kimberly Colvin, who has made an “initial study of learning in a MOOC”, where she concludes that learners in MOOCs and in a physical class, with the same content, experienced the same learning outcome (Colvin, 2014, p. 263).

Another argument from the MOOC supporters is the branding potential for the universities offering MOOCs. An example of this is Tony Bates, who on his personal blog, argues that

“Most MOOCs succeed in the sense of bringing an institution’s reputation in terms of knowledge and expertise to many more people than it would in any other form of teaching” (Bates, 2014).

In general, it seems that there’s a pattern in the positive arguments, that chronologically they have moved from being all about the revolution of higher education to now be mostly concerned with the enhanced learning possibilities for MOOC takers and the branding possibility for universities. Lastly, as a rebuttal to the critique of MOOCs (that will be elaborated in the next section), this statement from Dennis Yang seems to represent how most of the initial very positive MOOC supporters reflects upon the current status of MOOCs:

“No matter where things end up with MOOCs, there is no question they have already provided wider access to education than anything that’s come before” (Yang, 2013).

An argument from the critics of MOOCs is that there is a rather low completion rate in MOOCs, which according to them is showing that MOOC takers lacks motivation and that those who signs up for MOOCs doesn’t learn anything since they do not complete the MOOCs.

However, this critique has been rebutted by Phil Hill, who has attempted to categorize the MOOC takers into different categories, since according to him, individuals have different ways of approaching a MOOC. The purpose of categorizing the MOOC takers is then to show that people sign up for MOOCs for different reasons. And many of them do not sign up with the initial goal of completing. The drop-out rate is therefore artificially high, since many of those who do not complete a MOOC are not just drop outs, they can just be someone who deliberately wants to take one or two lessons on a very specific topic covered in a MOOC, and not as such interested in taking a full MOOC over several weeks (Hill (A), 2013). He therefore argues that the low completion rate should be given less importance in an argument for or against the potential in MOOCs.
The categories Hill comes up where firstly called lurkers, passive participants, active participants and drop-ins (Hill (A), 2013). But, from feedback and inputs from readers of the original article, he then later amended the categories to the five below groups of MOOC takers:

1) No-Shows – people who register but never login to the course.
2) Observers – These students login and may read content or browse discussions, but do not take any form of assessment beyond pop-up quizzes embedded in videos.
3) Drop-Ins – These are students who perform some activity, but who do not complete the entire course.
4) Passive Participants – People who may watch videos, take quizzes, read discuss forums, but who do not otherwise engage with the assignments.
5) Active Participants – People who take part in discussion forums, the majority of assignments and all quizzes & assessments. (Hill (B), 2013).

An important aspect of these categories is that they are not static and may change over time, thus a MOOC taker may start out as an observer, but end up as an active participant, during a course (Hill (A), 2013). This could for example happen if a MOOC taker initially just wanted to view two lectures on a very specific topic, within the MOOC, but finds it interesting and decides to continue and actually complete the MOOC, thus becoming a passive or active participant (Hill (A), 2013).

Below is a summary of some of the main themes in the positive articles and the arguments in them.

<table>
<thead>
<tr>
<th>Theme</th>
<th>General argument</th>
<th>Example of sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to education/</td>
<td>It’s free and all it takes is internet connection/ gives everyone access to education</td>
<td>(Koller, 2012) (Pappano, 2012)</td>
</tr>
<tr>
<td>Democratizing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedagogy/ Blended learning</td>
<td>MOOCs give greater reflection about the purposes and pedagogy of higher education/MOOCs can help to reach best practice in teaching.</td>
<td>(Daniels, 2014, p. iii) (Fournier, Kop, &amp; Durand, 2014, p. 13)</td>
</tr>
<tr>
<td>Branding</td>
<td>“MOOCs can extend the institution’s reach and reputation internationally.”</td>
<td>(Educause, 2012) (Bates, 2014)</td>
</tr>
</tbody>
</table>

Table 2: Themes in the positive literature
3.1.2 Critical Literature

“It is a myth to think that providing not-for-credit open online learning from the USA will address the challenges of expanding higher education in the developing world” (Daniels, 2012, p. 13).

One of the main themes in the critical MOOC articles is that MOOCs have not democratized or given open access to education to everyone, as promised by the MOOC supporters. The argument is that the published demographics of the MOOC takers, shows that they are already educated and from developed countries. This has lead to critical headlines in the media, such as James Vernon, who in an article for The Guardian, wrote that “The promise of MOOCs to improve access and democratize knowledge is a chimera” (Vernon, 2013). Headlines from other media includes this one from David Glance “The MOOC revolution that never happened” (Glance, 2014) an article which further argues that “If universities do eventually experience a revolution, it will not be because of MOOCs” (Glance, 2014)” in the same category is this headline “The MOOC revolution that wasn’t” (Friedman, 2014).

So, the main arguments for that there has not been a revolution seems to be related to the demography of MOOC takers. According to the critics, this shows that MOOCs are not helping the developing countries in practice.

Further, Haggard summarizes his review of negative journalistic articles with this statement “Critical journalism decries the hype surrounding MOOCs and claims that their benefits are illusory, and that in reality MOOCs harbour undesirable and inappropriate behaviours.” (Haggard, 2013, p. 7). Further, he observes that “anecdote, observation and a count of search query returns suggests that the proportion of negative commentary may be rising.” (Haggard, 2013, p. 7).

Indeed there may be a trend in anti-MOOC literature, as George Siemens has also observed when he stated that “Critiquing MOOCs is now more fashionable than advocating for them” (Siemens, 2013), something Jonathan Reeds, professor at Colorado State University, agrees with, stating that “Anti-MOOC really is the new black” on his personal blog (Rees, 2013).

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3 Creator of what is perceived to be the first MOOC ever, thus by some perceived as the godfather of MOOCs (Tamburri, 2014)
Below is a summary of the arguments and themes in the more critical MOOC literature.

<table>
<thead>
<tr>
<th>Theme</th>
<th>General argument</th>
<th>Source examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics of MOOC</td>
<td>Majority of MOOC takers are from developed countries and already educated, thus not a “revolution” for the developing countries</td>
<td>(Daniels, 2012) (Glance, 2014) (Stokes &amp; Gallagher, 2013)</td>
</tr>
<tr>
<td>Completion rate</td>
<td>Low completion rate between MOOC takers.</td>
<td>(Daniels, 2012) (Glance, 2014)</td>
</tr>
<tr>
<td>Recognition issue</td>
<td>Universities and employees do not recognize and accept the MOOCs.</td>
<td>(Ong &amp; Grigoryan, 2015)</td>
</tr>
<tr>
<td>Not innovative</td>
<td>The basic principles of MOOCs already existed. MOOCs are ”packaging over content”.</td>
<td>(Baggaley, 2013, p. 369)</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>A university/lecture experience cannot be re-created online. A physical lecture and a MOOC will therefore have different learning outcomes.</td>
<td>(Bali, 2014, p. 52)</td>
</tr>
</tbody>
</table>

Table 3: Arguments in the critical MOOC literature

Having established an understanding of the positive and negative arguments for the potential in MOOCs in the literature, the next section will try to look into if it is possible to further understand and explain the MOOC hype, by using a model called Gartner’s Hype Cycle.

3.2 Understanding the MOOC Hype

In 2012, New York Times dubbed the forthcoming year 2013 ”year of the MOOCs” (Pappano, 2012) and as seen in the previous description of the positive MOOC literature, the superlatives and positivism towards MOOCs and their potential are easy to find. But, in the end of 2013, the supposed “year of the MOOC”, the very same newspaper implied that MOOCs might have been a failure, or at least that they may be suffering from severe setbacks (Lewin, 2013). Around the same time an online education news media, Inside Higher Education, published an essay, written by two university executives4, with the title “Year of the Backlash”, clearly referring to the 2012 New York Times headline (Stokes & Gallagher, 2013).

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4 The authors of the essay Peter Stokes and Sean Gallagher are respectively vice president of global strategy and business development at Northeastern University and chief strategy officer at Northeastern University (Stokes & Gallagher, 2013).
But what has happened, or rather what has not happened in the MOOC sphere, since the same newspaper can go from declaring 2013 the "year of the MOOC" to argue for the "failure of the MOOC" in less than a year? This may of course simply be due to the fact that MOOCs where build up to be something that they were not, and that they never had the potential to live up to the hype to start with, as George Siemens also reflects upon with this quote “I don’t think anything could live up to the hype that MOOCs were being proclaimed to be able to achieve” (Tamburri, 2014).

But, instead of looking at the MOOCs itself, another understanding of the change in the perception of MOOCs can maybe also be reached by looking at the nature of hype instead. One tool that enables us to do so is a model called Gartner’s Hype Circle. This is a model developed and used to describe how new technologies develop over time, and how the hype surrounding them is changing (Gartner, 2014). The main purpose of the model is then to predict the development of new innovations. Even though the cycle is developed for businesses or investors to decide if and when they should move in on a market- or invest in a new technology, it is useful to apply to MOOCs, because it provides a good illustration of the whole MOOC discussion and MOOC hype.

But before going into a discussion of how the cycle can be a useful tool to understand the MOOC hype more generally, a brief explanation of the idea behind the cycle is necessary. Basically the cycle shows five key phases of a technology’s life cycle, these are:

1) Technology Trigger: A new "technology” is invented, and the hype starts, the first proof of the potential of the product is seen and media starts writing about it but "commercial viability is unproven” at this stage (Gartner, 2014).

2) Peak of Inflated Expectations: The peak of the hype, success stories, and the product are talked up to be the next big thing. According to Gartner, this is the phase where the first companies starts to take action (Gartner, 2014).

3) Trough of Disillusionment: The first doubt kicks in, the product has not lived up to its hype and interest wanes, the first companies starts to pull-out and new investors demands improvements if they are to invest (Gartner, 2014).

4) Slope of Enlightenment: New possibilities and potential are seen in the product, and it becomes clearer in what ways the product is useful and in what way it is not (Gartner, 2014).
5) Plateau of Productivity: The technology is now mainstream and expectations vs. reality is more balanced. There are many actors on the market and it is clear to consumers and producers what the product can offer (Gartner, 2014).

The cycle can then be illustrated in a graph like the one below

![Gartner's Hype Cycle](image)

Figure 2: Gartner’s Hype Cycle

The trick is then to point out and identify where on the cycle a technology is, and when it will move on to the next phase, and then act accordingly to the relevant phase.

The question is then if this hype cycle is applicable to MOOCs and if it can be useful in understanding the development in the MOOC perception? While searching for the answer, it has been possible to identify four articles and blog posts who attempts to apply the hype cycle to MOOCs, these are (Tapson, 2013) (Neal, 2013) (Watters, 2013B) and (Gartner, 2014), though there may of course exist other articles, that went under the radar when researching for this thesis.

The consultancy company behind the cycle, Gartner, put MOOCs at the peak of expectation in July 2013 (Gartner, 2014) but blogger and education journalist Audrey Watters claimed on her blog later that year that:
“If 2012 was, as The New York Times decreed, the year of the MOOC, 2013 might be described as the year of the anti-MOOC as we slid down that Gartner Hype Cycle from the “Peak of Inflated Expectations” and into the “Trough of Disillusionment.” (Watters, 2013B).

Neal Meghan also claims that “MOOCs have squarely transitioned from the Inflated Expectations to the Disillusionment phase” in an article for the online magazine Motherboard (Neal, 2013).

One of the more thorough attempts to use the hype cycle on MOOCs comes from Jonathan Tapson, Deputy Dean and professor at University of Western Sydney (Tapson, 2013) who in a blog post from September 2013, argues that MOOCs are in the phase of “through of disillusionment”. He also illustrates his prediction on how MOOCs will evolve according to the Hype Cycle, via the below illustration:

As showed in the graph, Tapson places the MOOC hype in the “through of disillusionment” phase, in year 2014 and 2015. So, what is interesting to derive from the articles is the discussion of whether MOOCs are at the “peak of inflated expectations” where the hype is still positive or if MOOCs have moved to the "trough of disillusionment". Watters, Neal and Tapson argue that the hype has moved towards disillusionment, whereas Gartner claims that it at the peak of expectation, but they did so in July 2013, prior to those who put MOOCs in the disillusionment phase.
Two things can therefore be observed from this. Firstly, using the hype cycle on MOOCs seems appropriate in the way that MOOCs can be seen as a new innovation or technology, for which the theory was developed. Secondly, it seems that, starting from around autumn 2013, MOOCs are now in the phase of disillusionment, which may explain the rise of critical articles on MOOCs, and the development in the general Media discourse, which is no longer overly positive, but more nuanced, perhaps even disillusioned, as exemplified by the two New York Times articles.

The current writings on MOOCs, whether it is academic articles, personal blogs or news media stories seems to be divided by either a critical or positive perspective, in the literature review it therefore makes sense do divide the articles into those categorical frames. Doing so reveals that the main argument from the positive articles seems to be that MOOCs have a potential in revolutionizing and democratizing education as we know it, in the way that it gives everyone access to education.

A review of the negative articles however reveals that their main arguments seems to be concerning the fact that what MOOC offers already existed, and that data shows the lack of revolutionary potential, since firstly there is a general low completion rate in MOOCs and secondly the majority of MOOC takers are educated and from developed countries.

So, only based on the literature, a summary of the arguments combined could be somewhere along the line of this quote:

“Open online courses are neither useless nor the salvation of higher-education” (Ho, 2014, p. 33).

Having established a wider understanding of MOOCs in part I, it is now possible to go more in depth with MOOCs in part II of this thesis. The next chapter will therefore introduce part II and the first case study.

**Part II: Case Studies**

**Chapter 4: Reciprocity and Symbolic Capital via MOOCs**

In the previous sections it has been attempted to provide a wider understanding of the MOOC phenomenon by looking into the history, providers and users and the MOOC literature. Having done so, it is now possible to go in depth with MOOCs. This section will therefore discuss the potential in MOOCs for Danish universities, using gift giving theory and symbolic capital and
applying that to two interviews with representatives from two Danish universities and one interview with an expert on the field. Lastly it will be discussed if MOOCs can also be viewed as a policy tool for the Danish government. Firstly, the theories of gift giving and symbolic capital will be described as they shall be applied in the analysis. The first of these are the theory of gift giving.

4.1 Gift Giving Theory

"Gifts have the superb characteristic of being at the same time free and obligatory, altruistic and self-oriented" (Komter, 2007, p. 103).

Gift giving has been a field of interest for anthropologists, sociologists and economists for over a century and the basic aim of most of the ideas within gift giving is to find an explanation of why we give gifts and what mechanisms are at stake (Komter, 2007, p. 104). Some of the earliest prominent theorists within the field includes Marcel Mauss, Levi Strauss and Georg Simmel (Komter, 2007, p. 93). In 1908, Georg Simmel argued that, regardless of the motive behind giving the gift, the gift would cause gratitude in any kind of group (Simmel, 1950). Mauss argued that gifting is a social phenomenon (Mauss, 1967) and some gives him credit for inventing the notion of reciprocity, when he wrote that gifting contains an obligation to give, receive and give back, in his 1923 essay “The Gift: Forms and Function of Exchange in Archaic Societies” (Sabourin, 2012) (Komter, 2007). Claude Lévi-Strauss also dealt with reciprocity in his 1949 book "Elementary Structures of Kinship” where he further developed and discussed Mauss’ concept of reciprocity (Komter, 2007, p. 93). The emphasis on reciprocity in gift giving theory has since only grown. Therefore this section will discuss the main theoretic frameworks within gifting theory but with an emphasis on reciprocity, because of its significance in the general theoretic framework and because the concept is especially relevant for the analysis of what universities might get out of offering MOOCs.

What the theories all have in common is that they try to explain the phenomenon of gift giving, but before one can do so, a definition of the actual gift is necessary. Basically, the span of the theories and ideas about what a gift is can be summarized down to this observation by Komter “any object can come to symbolize an existing or a desired tie to somebody else, and thereby become a gift” (Komter, 2007, p. 94).

Meaning that technically there is no clear definition, or consensus about what actually constitutes a gift, and that the definition will be dependent on the practice in which it is given. It is therefore
relevant to look at some of the theories within the actual gift-giving process (Skågeby, 2010, p. 171) and a good starting point for this, is to draw the line between the two main schools within gift giving.

In the gift giving literature there are two main schools, utilitarianism and anti utilitarianism which deals with the basic nature of why people give gifts (Skågeby, 2010, p. 171) (Komter, 2007, p. 101). The basic world view of utilitarianism is to look at the rationality and economy of giving a gift and the reasons for why an actor will give a gift, which is often believed to be influenced by an economic rationality (Komter, 2007, p. 101). On the other hand anti-utilitarianists looks at the social factors behind gift giving and they argue that gift giving cannot be explained just by looking at the self interest of the gift giver, hence reciprocity and calculated rationality are given less importance (Komter, 2007, p. 101).

But, in between these two poles, Komter argues that the gift transcends ”both utilitarianism and anti-utilitarianism and instead reflects a multi-purpose symbolism” (Komter, 2007, p. 104) in her article “Gifts and Social Relations The Mechanisms of Reciprocity ”, where she tries to take the gift giving theory further than the argument between utilitarianism and anti utilitarianism. Apart from these two overall approaches to the study of gift giving, there are also three main concepts that are used widely in the existing literature, these are; the motives behind the gift, the gift value and the reciprocal rules (Skågeby, 2010, p. 170). These three concepts will be explained further in the forthcoming sections.

4.1.1 Motives and Gift Value
The two main concepts within the study of motives behind giving a gift are other orientation and self centeredness. Other orientation refers to someone who is contributing to others’ welfare, without any expectations of a return and without feeling obliged to do so (Skågeby, 2010, p. 171), in gift giving this will refer to someone who is giving a gift without any expectations of getting any kind of return. Self centered gift giving is when someone is giving with the expectation of getting something in return. In the literature it is debated if pure other orientation even exist (i.e. will one ever give a gift without any expectation of a return in some form?). Some will argue, especially within economic theory, that there is always some covert self centeredness in every altruistic act (Skågeby, 2010, p. 171).

So, when looking at the motive behind giving a gift, it is necessary to look at the motive behind it in order to fully understand its nature, is it a self centered motive or is it a genuine motive, oriented towards the receiver of the gift solely? In an analysis of a gift giving situation, it is not easy to
conclude on if someone is acting as purely self-centered or purely other-oriented (Skågeby, 2010, p. 172), which is why the two schools, utilitarianism and anti-utilitarianism become relevant for an analysis. Because, since it hard to conclude on someone’s genuine motives one will have to rely on one’s general world view. Do we believe that A gave the gift to B of altruistic other-oriented- or self-centered reasons? And even if A told us that he gave B the gift out of pure altruistic “other oriented reasons”, how do we know that A speaks the truth? Therefore an analysis using these terms have a high risk of being subjective (Skågeby, 2010, p. 172).

Nevertheless, according to Skågeby, it is a good measure to see the motives for gift giving on a scale with self centeredness of the one end and other orientation on the other end (Skågeby, 2010, p. 172). So, even though it might be difficult to reach a conclusion on the motives behind giving a gift, the term serves as a good basis for a discussion of why someone will give a gift in a given situation.

The concept of gift value, in gift giving theory, refers to the actual value of the gift and within this field, Jaques Godbout and Alain Caille argue that there are three kinds of values a gift can have. These are; bonding value, exchange value and use value (Godbout & Caille, 1998, p. 173). Bonding value refers to the gifts’ value in terms of social relations and bonds and how it may create/maintain/enhance this. Exchange value is the quantitative value of the gift and use value refers to the usability of the gift (Godbout & Caille, 1998, p. 173). They also argue that, if a gift is given, with no bonding value it should not be considered a gift. This is because if no bonding value is present, it is merely an economic exchange, such as a purchase where something has a certain exchange value (the price of the good) and a certain usability to the buyer (Godbout & Caille, 1998, p. 173). The bonding value is therefore central to gift giving, since it emphasizes and creates social relations (Skågeby, 2010, p. 172).

4.1.2 Reciprocity
Reciprocity can be defined as the process of giving a gift which is motivated by another gift, for example, returning a gift to someone you have previously received a gift from. Reciprocity differentiates from other economic exchanges because in a classic economic exchange (e.g. buying a good), the exchange only happens under the condition that there is an immediate exchange of payment and reception of what is paid for (Kolm, 2006) (Sabourin, 2012, p. 306). Whereas in gift giving it is not a condition that you get something in return, however this does happen often, and
looking into reciprocity then means to look into the social structures of this give-and-return-cycle of gift giving.

Reciprocity has been called “the vital principle of society” by Hobhouse in 1906 (Hobhouse, 1951) and “one of the human rocks on which societies are built” by Mauss in 1924 (Mauss, 1967) and “a part of almost all societies and communities” by Jörgen Skågeby (Skågeby, 2010, p. 44). But, as also observed by Serge-Christophe Kolm, there are different kinds of reciprocity, which has been called something different according to different authors and theorists (Kolm, 2006, p. 28). Some of them are using different terms to describe the same concept, whereas some are using slight variations of each others’ concepts and develops them (Kolm, 2006, p. 28). So, what is important when dealing with reciprocity is to distinguish the motivations behind the reciprocity, since it is in this that the important differences are found (Kolm, 2006, p. 28). This also implies that, what one should be looking at, when using reciprocity in an analysis, is the motive behind returning a gift, because a gift is “bound and apt to carry meaning about the giver’s sentiments and intentions” (Kolm, 2006, p. 44).

In spite of Kolm’s argument, that there are differences in the literature of how reciprocity is defined and how it is labeled, the literature seems to agree on that there are three kinds of reciprocity. Marshall Sahlin called these three reciprocities; generalized reciprocity, balanced reciprocity and negative reciprocity in his 1972 book “Stone Age Economics” (Sahlins, 1972, p. 194) a definition Skågeby and to some extent Kolm, has also used in their more recent publications (Skågeby, 2010, p. 172) (Kolm, 2006, p. 29). Because of their applicability and previous use in case studies, these three definitions thus seem useful to rely on in an analysis of reciprocity.

Balanced reciprocity is when there is a more or less direct exchange within a narrow time frame, and the motive behind giving a gift is to maintain a social balance, the motive can therefore be to avoid a moral debt. Reciprocity is balanced when the exchange of gifts are considered fair. Gift giving that falls under this category could be a gift to a co-worker or a friend for e.g. a birthday, where it is then expected that the co-worker or friend also gives a gift when it is the first gift giving co-workers’ birthday. In that case, the giver then returns the gift with another gift, because he is in moral debt, since he received one on his birthday (Kolm, 2006, p. 29). Also trade and buying transactions can be classified as balanced reciprocity (Sahlins, 1972, p. 195).
Because of the rather immediate return and because of the moral obligation behind the return, the social ties that are at stake in a case of balanced reciprocity are less important. The actual material gift is thus more important than the social ties it may create/enhance/maintain, because it shall be seen as less personal and more economic (Sahlins, 1972, p. 195).

Negative reciprocity is where there is an immediate exchange and where the motive is to maximize one’s own benefit is therefore, as Sahlins puts it “an attempt to get something for nothing with impunity” (Sahlins, 1972, p. 195). Exchanges that falls under this category could be haggling, barter, gambling and even theft. The social relationship will often be of complete strangers and the two parts in a negative reciprocity will view each other as opponents, each trying to get the most out of the other, this is also why Sahlins called this form of reciprocity “the unsociable extreme” (Sahlins, 1972, p. 195).

Generalized reciprocity refers to altruistic transactions, such as sharing, hospitality or generosity that is done with no expectation of getting anything in return. It is as such also a weak reciprocity, because ideally there is no feeling of obligation behind the reciprocity. It will mostly happen between actors that have a close social tie (Skågeby, 2010, p. 172) and because there is no expectation of a return, time has very little importance as Sahlins explains this way:

“Generalized reciprocity is a sustained one-way flow. Failure to reciprocate does not cause the giver of stuff to stop giving: the goods move one way, in favor of the have-not, for a very long period.” (Sahlins, 1972, p. 194).

However, Skågeby observes a slight disagreement in the literature about general reciprocity, which is the matter of if the gift is given with no expectation of a return, or if there may be an expectation but that it comes in form of personal ambiguity (e.g. “helping my dad move the lawn makes me feel good”) instead of expecting a return from the receiver. Because if there are no reward in any form, is it then a reciprocity? The social bonds that this gift may create and the personal reward it may give is then what makes it reciprocity, so it can be argued that there will always be a personal expectation of personal ambiguity, because without this expectation it cannot be classified as reciprocity (Skågeby, 2010, p. 172). The important aspect of general reciprocity is however that the counter obligation that there may be created, is not dependent on time or on balancing quantity or
quality in the gift, the expectation of reciprocity within general reciprocity is therefore indefinite (Sahlins, 1972, p. 194).

Within generalized reciprocity Komter further distinguishes between two kinds of generalized reciprocity, which refers back to the motive behind returning a gift. The first one is *liking reciprocity*, where a gift is returned because the giver likes the initial giver, because of the gift she/he gave, or because he/she likes the initial receiver as a person. The second one is *reciprocal liking*, which is reciprocity based on affection and altruism (Kolm, 2006, p. 28).

As with trying to analyze the motive behind a gift, one’s ability to look at a gift exchange where reciprocity is at stake will be influenced by one’s general perspective of the situation and whether you are viewing it from a utilitarian or anti-utilitarian perspective. Utilitarians will argue that reciprocity only happens because of an obligation or because of an expectation of personal profit maximizing, and they will most likely deny that general reciprocity even exists (Skågeby, 2010, p. 171). Anti-utilitarians will however rely on and believe in people’s ability to give something without necessarily expecting a return (ibid.).

But in relation to this, Aafke Komter argues that anti-utilitarianism and utilitarianism do not exclude each other, because human beings can be both generous and calculative and perhaps even both at the same time. She therefore argues that the gift reflects a multi-purpose symbolic ‘utility’ that transcends both utilitarianism and anti-utilitarianism (Komter, 2007, p. 104), and therefore she comes up with her own explanation of what makes reciprocity effective. She does so by listing five elements that determines the effectiveness of reciprocity, these are: (1) the survival value of gift-giving; (2) the recognition of the other implied in reciprocity; (3) the three obligations involved in it; (to give, to receive and to reciprocate) (4) the morally binding character of reciprocity; and (5) the fact that reciprocity combines generosity and self-interest (Komter, 2007, p. 101).

Mauss and Hobhouse couldn’t possibly emphasize how important they perceived reciprocity to be, with their previously described statements suggesting that it is a vital principle for our society. However, their rather mechanic view of reciprocity as being an automatic necessary process, is challenged by Bourdieu, who in his 1977 “Outline of a Theory of Practice” introduces two important arguments in regards to gift giving and reciprocity. One is that reciprocity may not
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happen automatically as e.g Mauss and Hobhouse argues, and secondly he also introduces the importance of time. He does so by stating that:

“If the system is to work the agents must not be entirely unaware of the truth of their exchanges, which is made explicit in the anthropologists mode, while at the same time they must refuse to know and above all to recognize it” (Bourdieu, 1977, p. 6). A statement that he elaborates by saying that “all experience of practice contradicts these paradoxes, and affirms that cycles of reciprocity are not the irresistible gearing of obligatory practices found only in ancient tragedy, a gift may remain unrequited, if it meets with ingratitude, it may be spurned as an insult.“ (Bourdieu, 1977, p. 9).

Bourdieu further explains that, if one neglects the importance in time in reciprocity, one also neglects the fact that actors can act strategically and that, is according to Bourdieu, what the theories, before him has done. Thereby by he introduces the idea of actors as strategically conscious and time as a strategic tool. The way actors can use time strategically in reciprocity is thus to “keep one’s partner opponent in the dark about one’s intentions” (Bourdieu, 1977, p. 7). However, this refers to reciprocity in every sense as for example in gift giving but also in for example the case of a revenge murder, hence the phrase used opponent. Within gift giving, a delay in returning a gift can signify ingratitude and be perceived as an insult and “after a certain point lack of response ceases to be an oversight and becomes disdainful refusal” (Bourdieu, 1977, p. 7).

So, to summarize the theories, there is the idea of three kinds of reciprocity with different motives behind them. Getting a return gift is then a possible outcome of giving a gift. This way the concept serves as a good purpose for an analysis of MOOCs, since it can help answering the question of what universities might get out of offering MOOCs. But, for the analysis it is important to remember that reciprocity is not a mechanic process that happens automatically as Bourdieu argued, and further one cannot just see it as altruism or utilitarianism, there may be something in between or there may be both at the same time, as also argued by Bourdieu and Komter. Further, in an analysis of gift giving, one must not neglect the importance of time as a strategic tool in gift giving, as argued by Bourdieu.

The next section will briefly describe the concept of symbolic capital, along with a discussion of how this is related to gift giving and why it matters for universities.
4.2 Symbolic Capital

“Symbolic capital is a credit; it is the power granted to those who have obtained sufficient recognition to be in a position to impose recognition” (Bourdieu, 1989, p. 23)

According to Bourdieu there exist four forms of capital, these are economic, social, cultural and symbolic (Bourdieu, 1989, p. 17). In this section his idea of symbolic capital will be described. The emphasis on symbolic capital in this case study is because this form of capital is important to universities, as will be elaborated below, it can further be linked to gift giving (which can be linked to MOOCs). Therefore it provides a useful framework for an analysis of what the universities can get out of offering MOOCs, as will also be elaborated later.

Bourdieu argues that symbolic capital can be found almost anywhere, and that the most central aspect of it is that it exists when it is recognized by the actors who have it, or believe that others have it (Bourdieu, 1989, p. 21). The difference between symbolic capital and Bourdieu’s other forms of capital is therefore, as summarized by Siisiäinen, that “Economic and cultural capital have their own modes of existence whereas symbolic capital exist only in the "eyes of the others"” (Siisiäinen, 2000, p. 13).

Another central aspect in symbolic capital is that, when it is recognized, it works just like other forms of capital, in the way that symbolic capital can define and reproduce power relations between actors. This way, symbolic capital is “nothing other than economic or cultural capital when it is recognized” (Bourdieu, 1989, p. 21).

The effectiveness of symbolic capital therefore depends on practices of communication, and it is something you have when it is recognized by others. Therefore, what makes symbolic capital, is something that is negotiated in a social relationship, because it derives from certain “properties“ such as, reputation, language, clothing, or interior furnishings, and when these properties are recognized by an external actor, the symbolic capital is then transformed into power relations (Bourdieu, 1989, p. 297).

The link between gift giving and symbolic capital, is according to Osteen, that “gift giving generates and enhances these forms of non economic capitals” in the way than one can maintain or create symbolic capital from giving a gift (Osteen, 2002, p. 24).
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The bottom line of these theories combined then seems to be that there is a link between symbolic capital and gift giving, in that giving a gift can influence the symbolic capital of an actor, regardless of the motivation behind giving the gift.

Having established an understanding of gift giving, symbolic capital and the link between these, the next section will then discuss how symbolic capital is applicable to universities, and why it is important to them, before moving on to an analysis of if and how MOOCs may contribute to universities’ symbolic capital.

4.2.1 The Importance of Symbolic Capital to Universities

“The university has become thoroughly promotionalized.” (Hearn, 2010, p. 208).

In 1991, Andrew Wernic wrote the book “Promotional Culture: Advertising, Ideology and Symbolic Expression” (Wernick, 1991) in which he is commenting on universities as being increasingly focused on PR, entrepreneurship and monetary funding and where he is describing how branding is getting a more central role for the universities (Wernick, 1991, p. 156). According to Alison Hearn, though reputation and competition has always been important for universities in recruiting students, the novelty of Wernick’s idea lies in the argument that universities has become more self aware, and that the academic brand and reputation of universities has become monetized and objectified (Hearn, 2010, p. 198).

The result of this development, along with the technological development that has followed since the early 90’s, is thus that it has lead to a more central role of reputation and branding in the universities’ strive for generating capital (Hearn, 2010, p. 206). According to Hearn this means that “the generation of symbolic capital, via reputation building and image management becomes a central concern for individuals and institutions”(Hearn, 2010, p. 206).

Furthermore, according to Adam Arvidsson people working with branding, use symbolic values to create or strengthen a reputation, and they also try to create a community of followers (Arvidsson, 2005, p. 244). Thus, in branding in general and in university branding, there is a notion of symbolic capital, in that the construction of a community demands symbolic capital. But they can also accumulate their symbolic capital by their reputation and image (Arvidsson, 2005, p. 244).

Hearn further argues that, for universities that have a more well-established reputation and brand, it is more simple to convert this reputation into capital, than it is for a university with a less
established reputation, which is why they may need more branding to enhance their reputational identity (Hearn, 2010, p. 209). According to that argument, it therefore seems that, for universities with less-established brands, gaining symbolic capital is even more important, whereas for universities with an already established brand, the symbolic capital that they already have, can be turned into actual capital. This argument is aligned with Bourdieu’s idea that symbolic capital is reinforced and reproduced when used by those who posses it (Bourdieu, 1989, p. 21).

4.3 Motivation, Reciprocity and Capital in MOOCs
“The question is, can one specify social or economic circumstances that impel reciprocity toward one or another of the stipulated positions, toward generalized, balanced, or negative reciprocity? I think so.” (Sahlins, 1972, p. 195).

In this section the concepts of motivation and reciprocity, from the gift giving theoretic framework, will be applied to the cases of two Danish universities. They will be combined with the theory of symbolic capital, in a discussion of what the universities potentially can expect to get in return for offering MOOCs for free.

Firstly, a discussion of the motives behind the universities’ decision to offer MOOCs will be outlined, followed by an analysis of possible reciprocal outcomes in MOOCs.

4.3.1 Case: Danish Universities and MOOCs
In order to explore why the two universities have chosen to offer MOOCs and what they get out of it, staff members from Danish Technological University and Copenhagen Business School has been interviewed.

The interview concerning CBS and their decision, was made with Wilbert van der Meer. He is director of Dean of Educations’ Office at Copenhagen Business School (Communications, 2014) and he is also the contact person on one of the initial press releases about CBS offering MOOCs (Koldby, 2013). It was therefore assumed that he had relevant background knowledge about the strategic decision behind when CBS decided to offer MOOCs.

The interview concerning DTU and their decision was made with Hanne Jarmer. She is associate Professor at Department of Systems Biology and she was the one who took contact to Coursera when DTU decided to pursue the idea of offering MOOCs. She has further been quoted in news articles about DTU being the first Danish university to offer MOOCs (Kokkegård, 2013), it was therefore assumed that she had insight into the strategic decisions at DTU.
To discuss the findings from the above interviews and the literature review an expert interview was conducted. The criteria for the expert were that the person should have general broad knowledge on the field and not have any pre-defined agenda, but be more of an observer.

The choice of expert fell on Lone Gulbrandsen Tønnesen, she has written a blog (MOOCs.dk) since 2011, where she has been observing and commenting on the MOOC phenomenon (Tønnesen, 2011) further she has appeared in news articles on MOOCs (Mehlsen & Pedersen, 2014) (Kongsted, 2014) and as a speaker on conferences (EDUdisrupt, 2014). It was therefore assumed that she had broad insight and knowledge in the field of MOOCs.

The aim of the expert interview was to get new knowledge and insight into the MOOC field, and to further explore and test existing knowledge and ideas, gained from literature review, case studies and in-depth interviews.

The quotes used in the forthcoming analysis are from the above described interviews.

4.3.2 The Motivation behind MOOCs

It is relevant to look at the motives for the universities to offer MOOCs because it can give an idea about what the universities are expecting to get out of it, in other words what are their expectations for a reciprocal return? This section will thus look at why the two universities chose to offer MOOCs and what they expect to get out of it.

When Jarmer from DTU was asked about why they decided to offer MOOCs she answered:

"it was more than one thing, but one of them was that I thought; how can it be as prestigious to teach as it is to research? This was one of the most important reasons. I had seen that the lecturers at Coursera personally got a lot of PR, they were stars, I could see that it could be a way to help my lecturers to get something more from being a good lecturer. Then there is the way Coursera build the courses with pedagogy, that is super-smart and it works, so that was the primary reasons. Then I thought that if DTU had courses out there, along with the best universities in the world, it wouldn’t exactly mean bad publicity” (Interview with Jarmer, 2014). She further stated that:

“There has not been anything from the management about that in order for the MOOCs to be considered successful we need this many more students each year or something like that, they could see the value alone in the PR.” (Interview with Jarmer, 2014).

van der Meer from Copenhagen Business School, explained that they had three main reasons to start offering MOOCs, he explained them this way:
“One reason that we wanted to become more visible internationally, amongst the other universities we want to cooperate with and to the students we want to attract, so there was a visibility agenda. Then there was at the same time a desire to learn more and get experiences about what MOOCs was and how it could be used and what the possibilities were, and we thought that we could only get that experience by being a part of it ourselves. The last main reason was that we wanted to use the MOOC technology and development in relation to our existing courses and regular students. To get experiences that could influence or directly be used on our regular courses has always been a major part of the reason” (Interview with van der Meer, 2014).

Asked what they expect to get in return, he answered “We have been very clarified about that there are no direct economic return, quite the opposite, we had put aside some money that we were going to use on it, but the return comes in getting better at making online learning, that has been our goal with the investment” and further that “I don’t think we will get any economic return as such. But it has an influence on our branding, but probably not on a scale that could be measured economically” (Interview with van der Meer, 2014).

So, to sum up, whilst the two universities do not expect a direct economic return, there is an expectation to get PR and a better reputation (in general-and for their professors) and an expectation to learn something about blended learning, in order to become more competitive and attractive towards the students. It therefore seems that both the universities are offering MOOCs out of self-oriented reasons, because there is an overt expectation of some sort of reciprocal return.

In the next section it will be discussed if the universities can get a return from offering MOOCs and in what way.
4.3.3 Symbolic Capital and Reciprocity in MOOCs

As seen from the interviews with DTU and CBS, it seems that one of the motivations behind offering MOOCs was to be able to attract and choose from a better pool of students. In order to measure if this goal can be reached through MOOCs, it would be ideal to have numbers from the universities of the student intake, that showed how many of them are former MOOC takers. Unfortunately, none of the universities used in this case had such numbers, however Jarmer from DTU stated that they had had a higher number of applicants, for the educations within the area of their most popular MOOCs, than before. She explained it this way:

“\textit{It is hard to say, because our intake has increased on most programmes year after year, however it has increased even further now, but it’s hard to say if that is because of Coursera. We haven’t looked into that actively, I would like to know that as well, but it has not decreased that’s for sure. I don’t remember exactly, but I think there where a 16-20\% increase in applications within the relevant field of Anders’\textsuperscript{5} courses}” (Interview with Jarmer, 2014).

But from this it is impossible to say if the number of applicants is higher, because of the MOOCs, since it could of course be related to a lot of other things. Nevertheless there seems to be an increase in the number of applications for the physical full degree programmes at DTU, that are within the same field as their MOOCs.

Since it is not possible to do quantitative measures on the student intake, it is therefore the qualitative method combined with the theory of gift giving and capital that seems to be useful in answering the question of what the universities can get out of offering MOOCs.

Further, the possible reciprocity in MOOCs is relevant to explore because, according to Duran Bell “\textit{The value of a gift to the receiver is indicated to its donor by the value of the reciprocal response.}” (Bell, 1991). How the MOOCs are perceived by the users, may thus be reflected in what they give the university in return.

MOOCs are in this sense seen as a gift, because, by relying on Komters’ argument that ”\textit{any object can come to symbolize an existing or a desired tie to somebody else, and thereby become a gift}” (Komter, 2007, p. 94) it will be argued that MOOCs thereby falls into this definition, since it has a potential to create a tie between the university as a gift giver and the MOOC taker as the recipient. Gift giving theory, may then be helpful to explore what the MOOC takers can give the universities.

\textsuperscript{5} Anders Gorm Pedersen was the professor who ran the first DTU MOOCs on systems biology (Kokkegård, 2013).
The purpose of this analysis is thus to explore if the fact that the universities are giving out MOOCs for free, as a gift, can create a sense of reciprocity between the university and the MOOC taker, what kind of reciprocity and what the university can use it for.

In order to discuss this further, but without being able to quantify the data, and because it is an ongoing recent phenomenon, making it hard to look back at what the outcome has been, a discussion of future possible scenarios is necessary. In other words, it is necessary to discuss what could happen after a person has signed up to take a MOOC offered by DTU or CBS.

These hypothetic future scenarios will be developed from the knowledge gathered in the interviews and the theories of gift giving and symbolic capital. These scenarios are hypothetic and they do most likely not cover every possible outcome, but instead those who seems likely to happen, from what is known from the literature and interview data.

4.3.4 Scenarios
In regards to the potential in attracting students, directly or indirectly via MOOCs, Jarmer from DTU said:

“We have an expectation that all good pr we get, may help us to attract students, not that we are desperate, but we will of course always want the best students in the world, and the bigger a pool we can choose from and the bigger our foundation for choosing students are the better we might get in the end” (Interview with Jarmer, 2014).

And van der Meer from CBS said “Clearly the general awareness about us has an influence on how many applications we get for enrollment and scientific positions, so of course there are some general branding in it too” (Interview with van der Meer, 2014).

Further, in the expert interview, Tønnesen reflected on the possibility to attract students via MOOCs this way:

“The role of MOOCs is that they will find out about quality educations that they will not otherwise become aware of, because Denmark is a small country, and for a lot of people in the world, the Danish universities are unknown, so in my world MOOCs are helping to spread the message” (Interview with Tønnesen, 2014)
She further replied that “why should we share our knowledge, when where sitting on it tightly? Well, because by doing so, some students will come up here and study e.g Grundtvig in a year” (Interview with Tønnesen, 2014).

This knowledge leads to a possible future scenario, which is:

Scenario A: The MOOC taker is happy about the MOOC and what the university has offered him so far. The MOOC taker researches further on the university’s physical programmes and end up going to the university to take a full degree.

At the university the foreign student will then add a valuable asset to the study environment, as a part of the university’s desire to have a more international study environment. Something Jarmer from DTU also reflected upon this way:

“It can give us a lot if we get many international students, it gives a lot to the learning environment, and if you are learning in an international environment you learn better, so when the cultures clashes a bit you get a lot of knowledge from it, even though it can be a challenging environment to teach in” (Interview with Jarmer, 2014).

If scenario A happens, then the MOOC taker is “returning the gift” in form of eventually enrolling at the university. This means that the university gains symbolic capital indirectly, because it will then have a more international environment and brand, which could then mean that they are capable of attracting even more students.

Of other things that DTU and CBS expected to get out of MOOCs are PR, branding and publicity, as seen in this statement from Jarmer:

“I believe that for DTU in general it was primarily this thing about PR. I think the management at DTU wanted to join Coursera to get good publicity” (Interview with Jarmer, 2014). As also seen with this statement from van der Meer:

“Of course it gives us some publicity, and some branding value because of the publicity and the interesting thing about it is that it gives us a reputation within certain academic areas. So it can enhance something that we are already known for-and would like to be known for, because it is not” just “branding, it is branding that is connected to certain academic areas” (Interview with van der Meer, 2014). This knowledge leads to the next scenario, which is:
Scenario: B: The MOOC taker is happy about the university and the university gets a good reputation and PR.

In this scenario, the MOOC taker returns the gift, by giving the university a good reputation, which means that the university then gets more symbolic capital. The good reputation may then lead to that other students than the original MOOC taker goes to the university, to take a full degree. But even though the MOOC takers does not end up going to the university to take a degree, the university is left with a better reputation, that will then benefit them in order to gain international branding value, which is also one of the general goals for the universities.

But, if the universities fail to create and offer good MOOCs, and the MOOC takers thus end up being unsatisfied, the university could end up getting negative publicity and a bad reputation instead. As Jarmer from DTU also stated “…clearly if you are doing it all wrong, then it means you get bad publicity, so you have to make internal quality checks” (Interview with Jarmer, 2014).

Another scenario could therefore be:

Scenario C: The MOOC taker is not happy about the MOOC and the university gets a bad reputation.

The consequence, if the MOOCs are not done well and the MOOC taker gets a bad experience, could be that the MOOC taker will not recommend the university to anyone, which could then mean a general bad reputation for the university. The university’s reputation then risk becoming synonymous with the bad MOOC experience and the MOOC taker would possibly project the negative feeling from the MOOC towards the university.

An example of a more severe negative MOOC case is Georgia Tech’s MOOC “fundamentals of online learning: planning and application”, which crashed one week after it was launched, meaning that they had to suspend it, with more than 40.000 students signed up. This lead to a wave of negative publicity, the irony in the title of the course and the fact that it crashed, was of course not a fortunate circumstance either (Jaschik, 2013). If a university gets too much negative publicity, the university will get a negative reputation and they thereby risk losing symbolic capital.

Lastly there is the option that a MOOC taker is rather happy about a MOOC but is moving on swiftly after the MOOC has been taken, and the MOOC taker quickly forgets the name of the
University that offered the MOOC and where it is located. If this becomes the case we could have the next scenario which is

Scenario D: The MOOC takers’ positive experience does not fall back on the university.

The risk is then, that it is the MOOC platform, such as Coursera, that will get the symbolic capital instead, because the MOOC takers’ perception of the MOOC experience falls back to them, rather than the university. So the symbolic capital that the university has “earned” will instead go to the MOOC provider.

Below is a recap of the four reciprocal scenarios as described above:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Implications</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A</td>
<td>Attracting students</td>
<td>The university gains symbolic capital from internationalization</td>
</tr>
<tr>
<td>Scenario B</td>
<td>Good reputation and PR</td>
<td>Symbolic capital</td>
</tr>
<tr>
<td>Scenario C</td>
<td>Unsatisfied MOOC takers</td>
<td>Loss of symbolic capital</td>
</tr>
<tr>
<td>Scenario D</td>
<td>Goodwill towards MOOC platform rather than MOOC provider</td>
<td>No reciprocity for universities, no symbolic capital.</td>
</tr>
</tbody>
</table>

Table 4: Reciprocal Scenarios

It is in these scenarios Phil Hills’ categories of MOOC takers become relevant, because apart from being an argument against the emphasis on low completion rate, the categorization is also useful for a discussion of what universities might get out of offering MOOCs, since this arguably differs depending on who the MOOC taker is. So, if the university is to expect some kind of reciprocity, it would most likely be from passive or active MOOC takers, and not as much from the no-shows or observers, as it is assumed that the MOOC takers that falls under these categories will be the ones to pay least attention towards the university and be more focused on the content of the course (if focused at all). For the universities then, the most optimal outcome would be to create a MOOC where as many of the MOOC takers as possible will end up as active or passive MOOC takers, this way they will pay most attention to the university, and the chance of reciprocity, in some form, will be highest.

But, what would the consequences be, if the universities do not experience a feeling of reciprocity? Sahlins stated in 1972 that “generalized reciprocity is a sustained one-way flow. Failure to reciprocate does not cause the giver of stuff to stop giving: the goods move one way, in favor of the have-not, for a very long period.” (Sahlins, 1972).
This may be true to the extent that the universities will not stop offering MOOCs immediately if they do not receive an immediate return, they will most likely wait out and see if there are any long term advantages. However Tønnesen stated in the expert interview that:

“this may be a qualified truth, but those who have just transferred their existing courses to MOOCs, they need to see money soon, they need to see that they can get something out of this, they invested so many millions in it when it started in 2012, so they need a return in form of goodwill or other things” (Interview with Tønnesen, 2014).

But even if the universities does not get anything from the MOOC takers, they might have just learned and gained experience in e-learning that they can use in the full degree programmes, as van der Meer from CBS also stated in the interview “we wanted to use the MOOC technology and development in relation to our existing courses and regular students” (Interview with van der Meer, 2014).

If this is the goal then, a lack of reciprocity from the MOOC takers may not be too critical for the universities, but if the goal alone is to attract students and get a better reputation, it is crucial that the universities make successful MOOCs, in order to have a chance to get something in return from the MOOC takers.

An argument against the whole notion of reciprocity in MOOCs though, is that the symbolic capital gained from the MOOC might not fall back to the university as a whole, but merely to the specific course or professor. When reading online evaluations and feedback for specific MOOC courses on the MOOC platforms, it is more common to see statements such as “I highly recommend this MOOC” rather than “I highly recommend this university”, and since it is so easy to browse between the courses and universities, it can be argued that the positive feedback, sometimes does not fall back on the university in general. But, it can still be argued that at least amongst the active and passive MOOC takers, there will be some sort of consciousness about the university, from which they took a MOOC they were happy with, and this can lead to that the university is getting symbolic capital through the MOOC.

The response the universities are getting from the MOOC takers can furthermore say something about the product that they offer, as according to this previously used quote by Bell “The value of a gift to the receiver is indicated to its donor by the value of the reciprocal response.” (Bell, 1991, p. 159). This is probably true, but it will be different depending on the different categories of MOOC
takers. Drop-ins and observers will then not give reciprocity out of bad will, but they will not do so, because they entered the reciprocal cycle on complete different terms than the passive and active MOOC takers.

4.4 MOOCs as a Gift
From the interviews and articles, it seems that the Danish universities offer MOOCs because they want to learn something about e-learning, they want a good reputation and the possibility to attract students, which is also the conclusion Haggard reached in his literature review by saying that:

"There is consensus on the reasons that universities and learners, have for engaging in MOOCs. These are: brand extension, recruitment, educational innovation and revenue (or cost reduction) opportunity. (Haggard, 2013, p. 12).

So it seems that these expectations are shared by many of those universities that offer MOOCs worldwide.

When the theory of gift giving is applied to this, it can be argued that the universities are therefore self centered, meaning that they expect some kind of return for their gift. This return of a gift is also referred to as reciprocity, and by the development of future scenarios, it was then possible to discuss some future reciprocal outcomes, which combined with the idea of symbolic capital, gives an indication of what the universities can expect to get out of offering MOOCs.

This however, will also be a matter of the quality and execution of the MOOCs, and also depend on the types of MOOC takers, where it is expected that the universities are most likely get a reciprocal return in form of symbolic capital from the active and passive MOOC takers.

In relation to how the scenarios and arguments from the analysis can be said to be transferable to other cases, then it has not been possible to identify any factors in the analysis that are specific to the case universities or the fact they are located in Denmark. Therefore, since MOOCs are generally offered internationally, by universities from all over the world, and since the competition aspect for the universities are not much different from country to country, it seems that the theory, scenarios and arguments could be applied to any MOOC offering university from any country.

The arguments from the analysis therefore agree with Kevin Carey, who has stated that:

"Free online courses whose quality matches their institutional reputation ...could ultimately become as important to institutional status as the traditional markers of exclusivity and scholarly
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prestige. Technology, in other words, could give colleges and universities a brand strategy worthy of their names“ (Carey, 2013, p. 2).

With the knowledge from this analysis, the next section will discuss if MOOCs can therefore also be said to present a potential to act as a policy tool for the Danish Government.

4.5 MOOCs as a Policy Tool for the Danish Government

In 2013, the Danish Government launched a report called “Enhanced Insight Through Global Outlook” (Ministry of Science, Innovation and Higher Education, 2013), which is the first part of a visionary action plan, that includes specific goals for the internationalization of Danish education, that are to be reached by 2020.

One of the goals is that Danish universities need to attract more international students (Ministry of Science, Innovation and Higher Education, 2013). An example of a subject in the report is “Subject 2: Strong international learning environments” where it is stated that:

“...the export of Danish higher education and related knowledge must be strengthened. Educational institutions must attract talented international students who are willing to pay for a Danish education and can also contribute to our educational environments.” (Ministry of Science, Innovation and Higher Education, 2013, p. 4).

As for the export of Danish higher education and knowledge, MOOCs seems to be an obvious tool, because they provide the possibility to reflect Danish education values and traditions, as also stated by van der Meer “it can enhance something that we are already known for-and would like to be known for“ (Interview with van der Meer, 2014) and by Tønnesen with this quote “I see it as a billboard, not just a billboard, but if the goal is to attract students then it’s a billboard” (Interview with Tønnesen, 2014).

As for the possibility to make money from courses that are offered freely, and thus attract students who are willing to pay for their education, as is the ambition from the Danish government, Jarmer from DTU expressed her view like this:

“Most of us has come to realize that even though you offer a free course, that might be the same course as you also offer as part of e.g. an international master programme, where students pay for
it, then it should not be seen as bad business, because it’s like “the first fix is free”, right?” (Interview with Jarmer, 2014).

So, as for subject 2 of the Government action plan, MOOCs seem to present a potential in exporting knowledge and attracting fee paying students, that will then contribute to an international environment at the higher education institutions.

It also seems that the Danish Government is aware of the potential in MOOCs, in the way that they keep themselves updated. In the expert interview Tønnesen observed the Danish Government’s position towards MOOCs this way:

"I am actually really impressed with how far thinking and innovative they are, they have the finger on the pulse. It is mostly Danish officials I have been in contact with, but they are on top of it, and they are saying many clever things, and I also think that the publications from the Government has been positive, not that I shall be a Government supporter in this, but compared to what i see and hear with the latest news from North America, then they are really on top of it. It’s like they have set up some satellites around the world that are well informed and they listen to them. What they have come up with about internationalization, that is definitely coherent with what I also imagine the future will bring, we cannot just sit here and be little Denmark, we need to go out in the world. So, they are catching the trend well and they are trying to prepare us for what may come, so I think they are on top it” (Interview with Tønnesen, 2014).

Further, in the Danish version of the second part of the action plan (Uddannelses- og Forskningsministeriet, 2014) MOOCs are also specifically mentioned. The report, which includes 24 initiatives regarding how Denmark can attract and retain international students, describes MOOCs as a good tool to support the international environment in Denmark and to give international students a taste of Danish higher education (Uddannelses- og Forskningsministeriet, 2014, p. 15).... It also states that the Government perceives MOOCs as a good opportunity for Danish higher education institutions to brand their profile. The initiative from the Government is therefore to give the Danish universities a platform where they can exchange experiences and develop best practice within MOOCs, though they do not specifically describe how and when this platform will be developed (Uddannelses- og Forskningsministeriet, 2014, p. 15).

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6 However, the section on MOOCs does not appear in the English summary (Ministry of Higher Education and Science, 2014), it is therefore the authors own translation.
So it appears that MOOCs do have a potential in giving universities crucial symbolic capital and at the same time act as a helpful resource for the Danish Government in the aim of making Denmark and Danish education more international. But, since MOOCs are such a new phenomenon, especially in Denmark, we have yet to see if MOOCs can live up to this potential in reality.

Chapter 5: Regional Social Capital via MOOCs

Having discussed the potential in MOOCs when it comes to gaining symbolic capital and using it as a governmental policy tool, this case will look at the potential in MOOCs when it comes to gaining social capital. The use of MOOCs in this case varies from that of the universities, in the way that in this case, the MOOCs are meant to be regional. The aim is therefore to discuss how MOOCs can be used more widely than just as a branding tool for universities and how it at the same time can potentially be a policy tool for the EU. The shift from looking at social capital rather symbolic capital serves two main purposes in this case. Firstly, as will be elaborated below, social capital is a useful analytic tool when it comes to looking at a region. Secondly, the theoretic shift is also an attempt to look at the potential in MOOCs from another angle, in order to get a broader and more elaborated picture of the overall potential in MOOCs. Before the case study, the theory of social capital will be described.

5.1 Social Capital

“Social capital is the glue that holds societies together and without which there can be no economic growth or human wellbeing. Without social capital, society at large will collapse...” (Serageldin, 2001, p. iii).

The above quote may, or may not, be an overstatement of the importance of social capital, depending on who reads it, but regardless of what one may think of it as a reader, the idea of social capital has over the years made its way into various academic fields, such as sociology, anthropology, economics and policy making (Malecki, 2012). As Woolcock and Narayan has observed; social capital rose to remarkable prominence across all social science fields in the 90’s (Woolcock & Narayan, 2000, p. 225).

The “founding fathers” of the idea of social capital is arguably Robert Putnam (Putnam, Making Democracy Work; Civic Traditions in Modern Italy, 1993), Pierre Bourdieu (Bourdieu, 1986) and James Coleman (Coleman, 1988) with Bourdieu most likely to be the most quoted of the three.
Whereas Putnam is getting credit for integrating the concept with policy making and regional studies, Coleman is generally getting credit for popularizing the concept (Malecki, 2012). To get an understanding of social capital, it is therefore relevant with a description of how the three of them define it. Coleman explains that:

“Social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: They all consist of some aspect of social structures, and they facilitate certain actions of actors—whether persons or corporate actors—within the structure” (Coleman, 1988, p. 98). To this definition he added that “The more social capital is used, the more it grows” (Coleman 1988).

So according to Coleman, the function of social capital is that it is a valuable resource, which actors can use to achieve their interests. Looking at social capital as a resource implies that it is a mean that can be used to account for different outcomes, both at the individual level of social actors and at the level of e.g. institutions-to-individuals (Coleman, 1988, p. 101). As Coleman puts it:

“The concept of social capital allows taking such resources and showing the way they can be combined with other resources to produce different system-level behavior or, in other cases, different outcomes for individuals.” (Coleman, 1988, p. 101).

But he also adds that social capital is an unanalyzed concept in a case where one is looking at different outcomes; the unanalyzed part is the questions of how it came to be (i.e. where did the social capital come from?). The analyzed part is then looking at a case to observe the social capital and the outcome of it. This is also why Coleman argues that the social capital is “a second stage” in an analysis of what the outcome of social capital may be (Coleman, 1988, p. 101). According to Bourdieu, social capital is:

“The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group” (Bourdieu, 1986, p. 51).
How much social capital one has, therefore depends on the size of the individuals’ network, but also on the capital of the other members of the network (Bourdieu, 1986, p. 51).

It is possible to make a few important observations from this definition by Bourdieu. First of all Bourdieu’s definition is important because, according to Edward Malecki, it focuses on networks and relationships “rather than on what is possessed by an individual or organization.” (Malecki, 2012, p. 1025). Martti Siisiäinen further notes that social capital for Bourdieu is seen as a collective phenomenon “even though it is viewed from the perspective of actors who are exploiting its potentialities” (Siisiäinen, 2000, p. 12). According to Bourdieu, the link between the different forms of capital are that they can all be derived from economic capital, but the transformation from e.g. social capital to economic capital lies in the fact that there are some things than can be bought with economic capital solely (e.g. groceries in the western world), whereas other types of goods and services can only be obtained via relationships and networks (social capital), that has been established over time (Bourdieu, 1986, p. 51).

What is important to remember according to Bourdieu is thus that “economic capital is at the root of all the other types of capital” (Bourdieu, 1986, p. 51). Siisiäinen interprets the importance of social capital in Bourdieu’s theory this way:

“It may explain why the same amount of economic and cultural capital can yield different degrees of profit, and different powers of influence to different actors” (Siisiäinen, 2000, p. 12).

As for Putnam, even though he, in his own words, initially did not intend to “survey (much less contribute to) the development of the theory of social capital” (Putnam R., 1995, p. 67) his two early main writings on the subject, the 1993 book “Making Democracy Work; Civic Traditions in Modern Italy” (Putnam, 1993), and the 1995 article “Bowling Alone: America's Declining Social Capital” (Putnam R., 1995) are considered important contributions to the field. But, their relevance within social capital shall therefore perhaps not be seen in the light of their theoretic contributions, but merely in the light of their empirical analytical appliance of social capital.

Bonding capital relates to inwards looking tight communities which reinforces identities and homogenous groups, of same ethnic background, gender, religion etc, where emotional support is part of the social ties. Examples of groups with strong bonding capital are ethnic fraternal organizations or church based women’s book clubs (same gender, same religion), they are demographically alike (Putnam R., 2000, p. 22).

Bridging capital is more outwards looking towards other groups or individuals, that are less like oneself (hence the bridging). This could be heterogeneous groups, with a common cause but different background, Putnam’s examples are social rights movements or religious groups (they share the same religion but they may have different age, ethnicity and gender) (Putnam R., 2000, p. 22).

The function of these two forms of social capital is, according to Putnam that “bridging social capital can generate broader identities and reciprocity, whereas bonding social capital bolsters our narrower selves” (Putnam R., 2000, p. 23).

These two categories are not mutually exclusive though, they can both exist at the same time, it is therefore a matter of “more or less” rather than “either/or” (Putnam R., 2000, p. 23).

According to Siisiäinen, Putnam and Bourdieu differ in the way that:

“Putnam's idea of social capital deals with collective values and societal integration, whereas Bourdieu's approach is made from the point of view of actors engaged in struggle in pursuit of their interests.” (Siisiäinen, 2000, p. 10).

In addition to this understanding of social capital Derrick Purdue argues that “Trust between social and economic actors, as a necessary condition for innovation, economic development and democracy, is central to the concept of social capital” (Purdue, 2001, p. 2214).

According to Purdue his use of trust, in this argument, refers back to Mari Sako’s three definitions of trust (Purdue, 2001, p. 2214). These are, contractual trust, competence trust and goodwill trust (Sako, 1997, p. 3).

These forms of trust, shall be seen rather hierarchical, where in a business relationship there is a contractual trust, which is to fulfill the basic agreements and the business contract itself with “a shared norm of honesty and promise keeping” (Sako, 1997, p. 3). Competence trust is the shared understanding of professional conduct and to uphold ”technical and managerial standards” (Sako, 1997, p. 3). The relationship can then move on to involve goodwill trust, which can only exist when there is “consensus on the feeling of fairness” (Sako, 1997, p. 3). Purdue then links Sako’s forms of
trust to social capital by arguing that social capital depends on the level of trust between the actors (Purdue, 2001, p. 2214). According to Malecki, mistrust on the other hand, can weaken relationships and cooperation and thereby lead to the loss of social capital (Malecki, 2012, p. 1029).

One of the main issues of social capital, as defined by the three, is that their definitions are not that straightforward to apply to empirical data, as observed by Malecki (Malecki, 2012, p. 1024). Malecki therefore states that:

“Attempts to measure social capital, therefore, should recognize that it is a process, not easily measured, rather than a thing which is measureable” (Malecki, 2012, p. 1027).

Further, Woolcock and Narayan states that ‘Obtaining a single, true measure of social capital is probably not possible” (Woolcock & Narayan, 2000, p. 239). Furthermore, because it can be challenging to identify and measure social capital, Anderson, Park & Jack suggest that qualitative techniques are necessary for an analysis of a case, which involves social capital (Anderson, Park, & Jack, 2007, p. 265).

Having established an understanding of what social capital is and how it can be applied in an analysis, the next section will then discuss why social capital matters for a region, before analyzing how a region may gain social capital via MOOCs.

5.1.1 The Importance of Regional Social Capital
In 1993, Putnam wrote the book “Making Democracy Work; Civic Traditions in Modern Italy” (Putnam, 1993) where he studies regional differences in Italy, and in which he argues that regional differences can be explained by the difference in social capital in the regions. The main argument of the book is thus, as summarized by Siisiäinen:

“If a region has a well-functioning economic system and a high level of political integration, these are the result of the region’s successful accumulation of social capital.” (Siisiäinen, 2000, p. 1).

That social capital is important to regions has also been elaborated by others, for example Asheim, Coenen and Vang, who argues that social capital is an element that promotes the competitiveness of firms, regions and nations (Asheim, Coenen, & Vang, 2007, p. 657). Further, Mark Lorenzen argues that geography has an influence on social capital, and the other way around, in the way that “the
interdependencies of different types of social relations make dense combinations of them dependent upon geographic proximity” (Lorenzen, 2007, p. 805).

Malecki sums up the general idea of regional social capital neatly with this quote:

“Social capital is central to the development of regions; while hard to identify and challenging to measure, its effects are visible in many ways.” (Malecki, 2012, p. 1033)

Malecki also argues that social capital has a more visible impact on development, if analyzed on the level of firms and regions rather than if analyzed on a bigger scale, as for example on a national level (Malecki, 2012, p. 1026). Using Malecki’s arguments and by remembering Coleman’s argument that social capital is a mean to an end, just like other forms of capital, and that with the absence of social capital this end cannot be reached (Coleman, 1988, p. 98), there seems to be a coherent argument in the literature that social capital is important for a region in order to reach economic development.

Having established an understanding of social capital and its importance to geographic regions, it is now possible to discuss how MOOCs can be used as a policy tool at EU level and how it can lift a region, in a case of regional MOOCs, offered by University College Zealand.

5.2 Case: University College Zealand and EU’s Development Fund

5.2.1 Background: EU policies and MOOCs

“Massive Open Online Courses are changing the education landscape all over the world, and Europe cannot afford to lag behind” (Vasilliou, 2013).

In 2012 the European Association of Distance Teaching Universities (EADTU) which has “open education and MOOCs” as a policy area (EADTU, 2014) and which is considered a “key partner for the European Commission in developing a shared vision and leadership for the role of open and flexible higher education” (EADTU, 2014) created a MOOC platform named OpenupEd, which further “reflects European values such as equity, quality and diversity” (OpenupEd, 2014).

The EADTU is further committed to the creation of a European Learning Space in accordance with the Bologna Declaration\(^7\) and the ET2020 strategy\(^8\) (EADTU, 2014) and one way they are doing

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\(^7\) The bologna declaration from 1999 contains six actions:
1: A system of academic degrees that is easy to recognize and compare.
2: A system based essentially on two cycles: a first cycle geared to the labor market and lasting at least three years, and a second cycle (Master) conditional on the completion of the first cycle;
this is through the MOOC platform OpenupEd. Furthermore the members of EADTU “share a commitment to equality of opportunity, the lifelong development of talent, and to meeting the needs of the economy, culture and civil society in Europe at regional, national and pan-European levels.” (EADTU, 2014).

So, the aims of EADTU and OpenupEd are more than just providing education and MOOCs, it seems that the ambitions of using MOOCs are, amongst others, that they can help to promote European values and to strengthen Europe as a continent and at the same time help to achieve the 2020 goals of education and training and the Bologna Declaration.

Further, The European Commission has launched an initiative called “Opening up Education” which summarizes the aim of all the EU initiatives on this field, which is “to boost competitiveness and growth at the European level” (European Commission, 2013).

As for MOOCs’ role in these objectives and declarations, the equation seems rather straightforward; MOOCs offers free high standard education to every EU citizen. This will then lead to that the EU becomes more educated and thus it enables ”Europe to gain leadership in education, attract new talent, train its citizens with the relevant skills, and as a consequence fuel innovation, productivity and growth” as is a goal from the European Commission (European Commission, 2013), at least theoretically. So, the actual potential in MOOCs when it comes to using them for strategic purposes within education and training seems to be pretty clear, if it actually works is another discussion of course. But that discussion is then not as much about the potential in MOOCs in educational and training policies, it is rather a discussion of how to execute and fully harvest the potential. What needs to be discussed is therefore how MOOCs can be used to fulfill policy areas outside the education and training area.

One of them could be EU’s regional development policy, where it seems that MOOCs have also started to appear on the policy agenda. In 2013 the European Regional Development Fund which

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3: A system of accumulation and transfer of credits of the ECTS type.
4: Mobility of students, teachers and researchers.
5: Cooperation with regard to quality assurance.
6: The European dimension in higher education: increase the number of modules and teaching and study areas where the content, guidance or organization has a European dimension. (Europa.eu, 2010).

8 The ET2020 four strategic objectives, as the EU calls them, are: 1: Making lifelong learning and mobility a reality. 2: Improving the quality and efficiency of education and training. 3: Promoting equity, social cohesion and active citizenship – 4 Enhancing creativity and innovation, including entrepreneurship, at all levels of education and training (Europa.eu, 2009).
aim is “to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions” (European Commission, 2014) and which is a part of EU’s regional policy area (European Commission, 2014), funded a project called “Learning Without Borders”. This project was initiated in 2013 by University College Zealand (UCZ), in Denmark (Gynther, 2013). The next section will describe this EU funded project, followed by an analysis of how MOOCs could contribute to reaching the goal in the development fund and in the regional development policy.

5.2.2 A Regional Oriented MOOC Project

The objective of the Learning Without Borders project is “to research in and develop a regional oriented MOOC which can deliver free professional development courses for employees in companies that offers welfare services in the region” (Gynther, 2013). A project that now counts 5-6 MOOC projects within the overall project. In order to find out more about the project and how it will be used to lift a region, the project manager of the MOOC project, Peter Gundersen, was interviewed.

He was chosen for the interview because, as he is the project manager, it was assumed that he had sufficient knowledge and insight about the project at UCZ.

Gundersen opened the interview by stating that “this is just to say that the project has developed rapidly and already concerns a few cases, because we are working with 5-6 MOOCs within this project already” (Interview with Gundersen, 2014).

According to Gundersen, The “Learning Without Borders” project now involves these five areas:

1: Mandatory theory of science.

As a part of the diploma teacher education at UCZ, there is a mandatory course for everyone enrolled, which is theory of science. UCZ now offers this course as a MOOC to everyone, with the possibility to get credit for it if you are enrolled at the diploma teacher education at UCZ.

2: Mandatory re-training in cooperation with Roskilde Municipality.

As a part of the Danish governments’ 2020 goals, every primary school teacher must have teaching competence in all the subjects they teach in, whereas now it is “common that you teach a range of subjects but only have actual teaching competence in a few of them” (Interview with Gundersen, 2014). UCZ have then collaborated with Roskilde Municipality, so that the teachers can take the extra courses they need, as MOOCs.
The Potential in MOOCs

3: Flexible education.
As part of their professional bachelor degrees UCZ will offer more courses as MOOCs, so that the education becomes more flexible. Students can then take some courses, or parts of it, as MOOCs and other as physical regular courses. One of the ideas behind this is that students can continue to take courses towards their degree, while e.g. being on an internship abroad, or while on maternity leave.

4: Roskilde University Center (RUC) introductory courses.
In cooperation with UCZ, RUC offers introductory courses to their full degree educations as MOOCs, so that interested students have the possibility to try out some of the content of a full degree education, before applying for enrollment at RUC.

5: MOOC on MOOCs.
Lastly, UCZ have made a MOOC course on MOOCs. According to Gundersen, one of the milestones of the project was to make a knowledge sharing seminar and also there is a need from the staff to get more knowledge on how to make MOOCs. Thus now they can take the MOOC on MOOCs to get more prepared to create their own MOOC and to work with MOOCs in the future.

To sum up this five parted project, Gundersen stated in the interview that “somehow some way that must lift the general level of education in the region, at least theoretically, but it might not work in reality” (Gundersen, 2014). Further, Gerry Sweeney has argued that “Social capital allows regions to begin a ‘dynamic spiral of development’” (Sweeney, 2001, p. 161). But is it then possible to get this social capital via MOOCs? This will be explored in the next section, where it will be discussed how MOOCs present a potential in fulfilling EU policy goals, by lifting a region, using the theory of social capital and applying that to the case of UCZ and their regional MOOC project.

5.2.3 Social Capital via MOOCs
From the literature dealing with the analytic application of social capital, as described in the previous chapters, it can be summarized that social capital shall be seen as a process (Malecki, 2012), which makes it difficult to measure (Woolcock & Narayan, 2000, p. 239), thus if one wants to look at social capital, it is suitable to use a qualitative method (Anderson, Park, & Jack, 2007) where you look at the outcome of the social capital (Coleman, 1988).
Therefore, as in the previous analysis, it is useful to list a range of practical possible scenarios that may be the outcome of the MOOC project.

The scenarios are developed from the interview with Gundersen from UCZ, they will be supported by statements from the expert interview with Tønnesen.

After each described scenario, it will be discussed what the theoretic implications of these scenarios may be. Of course there are a number of outcomes that can happen in the future, more or less derived from this MOOC project, and it would be near impossible to list all of them. The below scenarios are therefore only those that can be argued to be the most likely to happen. They are kept within the framework of the social capital theory and the interview data and described from the knowledge generated from the theory and data, meaning that they do not consider extreme external events etc.

After all, the theory and interview does unfortunately not enable researchers to become fortune tellers, yet listing the scenarios presents a good framework and structure for the analysis.

For comparative advantages the first scenario will be the current scenario in the UCZ region, as seen from the perspective of Gundersen.

5.2.4 Scenarios
In the interview Gundersen stated that “One little thing we experienced in our region was this whole transportation thing, meaning travelling time and MOOCs present an alternative to this. One other thing is that there aren’t many different educations you can take. If you live in Vordingborg you can study teaching or pedagogy, so that’s why people become primary school-or kindergarten teachers, what else should they do? (Interview with Gundersen, 2014).

So, it seems that right now there is either a limited choice of education, or people choose to move away from the region in order to take an education. The current scenario is thus as follows:

Current Scenario: limited local education possibilities.

The current situation in the region is that some people will have to move in order to take the desired education, which presents a loss for the town, which is in need of young resourceful families to keep up a minimum spending, to fill out school places with their children etc. So, those who move away from the region, in order to take an education, will then mean a loss of social capital for the region.
Those who would like to take a different education than the ones offered in their town, but who do not move for different reasons, such as for example those who are too settled in the community with kids, spouses, jobs etc. will then not get the desired education and will have to look for other possibilities in local proximity. This may of course not have to be a bad thing; a family could easily get by, with not having an education and do unskilled work. However, in a 99’ study on educations’ impact on social capital Helliwell and Putnam concluded that “education can be seen as increasing rather than merely redistributing social capital” (Helliwell & Putnam, 1999, p. 6). This means that, if the citizens stay in the region and do not get an education, the region does not accumulate its social capital. Which neither means the death of the region, or the family for that matter, but nor does it provide many possibilities for regional development. Hence the situation does not add anything to the accumulated social capital in the region.

According to Coleman, if a family decides to move, this may even mean a direct loss of social capital (Coleman, 1988, p. 116). Further, to use the idea of Putnam, that the regions’ capital consists of the accumulative social capital (Putnam, 1993), in total, that can mean a loss of social capital for the region as a whole. So the paradox is, that if a family or person stay in the region and do not take an education they will not add anything to the accumulated social capital, but if they move, the region loses social capital.

This is however also one of the reasons the project was launched in the first place, as explained this way by Gundersen:

“… (MOOCs) give some people a possibility to take other educations than what they could before, without having to move away from their local environment, which they may not feel like doing, cause they might have kids or other obligations. And that’s where I see some of what the MOOCs have also derived from in the United States; that those who cannot afford education can now take it for free, and those who does not have geographic access to it now has access (Interview with Gundersen, 2014).

So, now that UCZ has launched the MOOCs and with the current situation in mind, there are different future outcomes, one is that the MOOCs enables citizens in the region to take a whole, or

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9 Because of the social relations you lose when you move, or when someone you know moves away from a place, relations that are crucial for one’s social capital, according to Coleman (Coleman, 1988, p. 117).
parts of an education, that they would have otherwise had to move to another town to take or had to spend a lot of transportation time to complete. The first possible scenario is therefore:

Future scenario A: Student Migration Prevention

In this scenario, the higher education of the citizens will then give the region more accumulated social capital, which can then lift the whole region. It can be argued then, that MOOCs indirectly provide the potential for more social capital in the region, because it enables some citizens in the region to take an education they would have otherwise not taken.

Another function of the MOOC project is that RUC are offering introductory courses to their educations as MOOCs as explained by Gundersen “They have been running these intro course where, if you are not sure about which programme to enroll in at RUC, you can choose to enroll in a few different courses from each programme as MOOCs, to get a sense of it and find out if it is for you” (Interview with Gundersen, 2014).

A possible consequence of the introductory MOOCs that RUC are offering could then be a lower drop-out rate. The hypothesis underlying this argument is that students who have the chance to test some of the courses that are part of a full degree, before enrolling, may become more confident about which education suits them and their interests. There could therefore be a lower risk of students enrolling in a degree, only to realize that it does not live up to their expectations, that it is too difficult or too far from their field of interest etc, which are probably common reasons to drop out of an education.

As for the flexible education aspect Gundersen mentions that:

“I think it makes sense on Zealand, if you have some teachers that needs to take a diploma, that they don’t have to drive to Næstved, Vordingborg or Slagelse\textsuperscript{10}, where we have our different campuses to take classes, so in many ways it is suitable, and the MOOCs makes a lot of sense to me. I also think it’s interesting that you can have it as a choice. If you can’t make it to class then you can just take it yourself. And that’s an interesting supplement to the regular physical classes because we see that the students have a lot of other priorities in their life than to take the diploma.” (Interview with Gundersen, 2014).

\textsuperscript{10}Three provincial towns on the Danish island Zealand, located between 30 and 60 kilometers from each other.
Noting the “other priorities” in the students’ lives, the current situation could then further be a reason to drop out, because of the transportation time and inflexibility that some of the students experience. But with the flexible MOOC supplement, it could mean that more students continue and finish their education, rather than dropping out or lacking behind.

Furthermore, the possibility to take the course theory of science, which is a mandatory part of the pedagogical diploma (PD), could mean that more students complete the education, as Gundersen formulates it:

“To our center for re-training and development it seems really smart that you can start by taking the first module, for free, without having to travel for it and then you are kind of already in the process of taking your diploma” (Interview with Gundersen, 2014).

The argument behind that idea is that if people start the education via the MOOC, and see that it is (hopefully) interesting and fun, they have already finished one module, making the decision to continue and finish the education easier and completing the education more comprehensible. This brings us to scenario B.

Future scenario B: More citizens take an education and lower drop-out rate.

As mentioned, Helliwell and Putnam has concluded that education gives and individual more social capital and since a regions’ social capital is the result of the accumulated social capital according to Putnam, we then get an equilibrium that looks like this: more education = more individual social capital and the accumulated individual social capital = a regions social capital. So, according to the theory this will mean that the higher the education level is in the region the more regional social capital there will be.

The MOOC project further involves both a co-operation with the Municipality of Roskilde and also with RUC. Gundersen explained the cooperation with the Municipality this way:

”It’s pretty normal that every teacher has a class where they don’t have official teaching competence, but this is not allowed from the year 2020, so it is a huge extra training task. We have therefore made a deal with Roskilde Municipality that their 600 primary school teachers who need
extra training can take these courses via MOOCs. So that is a really really large project, that I also believe will be a concept other municipalities will join” (Interview with Gundersen, 2014).

Furthermore, the project also involves an internal knowledge sharing aspect, as he explained this way:

“I also want to mention what we call the MOOC on MOOCs, which derived from the fact that there was an in-build milestone in the overall project that we had to make a knowledge sharing seminar, and we would of course do so via a MOOC, and at the same time there is a need in our organization to educate our teachers in handling teaching via MOOCs” (Interview with Gundersen, 2014). One possible outcome of this cooperation could then be the next scenario, which is:

Future scenario C: Enhanced cooperation internally at UCZ and between the Municipality, RUC and UCZ.

As for the cooperation between the organizations it is worth remembering Derrick Purdue’s argument that “Trust between social and economic actors, as a necessary condition for innovation, economic development and democracy is central to the concept of social capital” (Purdue, 2001, p. 2214).

This implies that the general cooperation between the three organizations, if build on trust, could give all of them more social capital and thus also more accumulated social capital, which will benefit the region as a whole. In order to maximize the social capital derived from this cooperation, it should be a cooperation build on more than just contractual trust. Using Sako’s terms, what matters is then the level of trust between the organizations. Is it contractual, is it competence trust or could it develop into goodwill trust (which would be the most optimal form of cooperation according to Sako (Sako, 1997, p. 3))? From what is known about the cooperation between the organizations it is difficult to say much about the actual trust level, but it seems that there at least is competence trust between Roskilde Municipality and UCZ, in that they have trusted their competences enough to try and expand the project to other municipalities, which exceeds the contractual trust, which was to only offer the re-training courses as MOOCs in Roskilde Municipality. If UCZ and RUC succeed with their projects,
and Roskilde Municipality lives up their obligations (which we know little about), then we could have scenario C as a possible outcome.

If the cooperation somehow turns out to not be successful, there could be created a mistrust between UCZ, RUC and the Municipality. Further, from the perspective of the citizens, if UCZ do not deliver the MOOCs in a satisfactory way and if perhaps the idea of flexible education turns out to not be a success for the students, it could also lead to mistrust between the citizens and UCZ and/or the Municipality. Which could then, instead of scenario C, lead to the following scenario:

Future Scenario D: Mistrust between the institutions and/or between the institutions and the users/citizens.

This will then create a form of negative capital, because mistrust in general weakens relationships and cooperation, and since relationships and cooperation is crucial to social capital, mistrust would then mean no social capital or worst case a loss of social capital (Malecki, 2012, p. 1029). The pitfall of the regional cooperation between UCZ, RUC and Roskilde Municipality and the interaction with the citizens, is that it could then be more harmful than useful if they do not succeed. Because if so, they will not gain any social capital and worst case they could lose social capital.

The below table is a summary of the scenarios developed by applying the theory of social capital to the case. The scenarios are not thought to be mutually exclusive, one of them may happen (or none of them for that matter), or more of them may happen at the same time and to varying degrees, however, the undesired scenario D naturally excludes scenario C.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Possible Implications</th>
<th>Possible Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Scenario</td>
<td>Limited educational possibilities meaning that people move or stay, but does not take a desired education.</td>
<td>No social capital to add to regions’ accumulated social capital, or direct loss of social capital.</td>
</tr>
<tr>
<td>Scenario A</td>
<td>Student migration prevention.</td>
<td>Social capital gained through higher education level/preventing social capital loss.</td>
</tr>
<tr>
<td>Scenario B</td>
<td>More citizens take an education and lower drop-out rate.</td>
<td>Social capital gained through higher education level.</td>
</tr>
<tr>
<td>Scenario C</td>
<td>Enhanced cooperation internally at UCZ and between the Municipality, RUC and UCZ.</td>
<td>Social capital gained through trustful cooperation.</td>
</tr>
<tr>
<td>Scenario D</td>
<td>Mistrust between the institutions and/or between the institutions and the users/citizens.</td>
<td>No social capital or loss of social capital.</td>
</tr>
</tbody>
</table>

Table 5: Social Capital Scenarios
The next section will discuss the role of MOOCs in this project in general, and discuss how this project may be helping to fulfill goals in the EU development policy.

5.3 Regional Social Capital and MOOCs

Even though this case only covers those educations offered by UCZ, which are mainly related to school- and kindergarten teachers, with or without a diploma (which is admittedly a narrow field) and even though it can further be discussed how many of those a region needs, it will still be argued from this analysis, that the MOOCs offered by UCZ have a potential to lift the region via accumulated social capital. This argument is derived from developing future scenarios, and applying the concept of social capital to the possible scenario outcomes. However, the analysis also reveals that there is a danger of losing or not gaining any social capital, depending of the cooperation between the involved organizations.

One could argue that what is at play here, already existed before the UCZ MOOC project, but before the MOOCs it was just called e-learning, something the critics of MOOCs also rely on, with the argument that MOOCs are just packaging over content.

So, how much credit can really be given to MOOCs and its potential when it comes to lifting the region and how much would have happened anyways via e-learning and regular online courses that already existed?

This thesis will argue that the possible benefit of this project, which is more accumulated regional social capital, can still be credited to MOOCs, for two main reasons.

Firstly, the courses offered by UCZ in this case are per definition MOOCs, they are Massive (or at least they have the potential to be, because everyone can sign up), they are Open (because they are offered through a platform where everyone can sign up, with no prior relation to UCZ), they are Online (they are offered through an online platform and can be taken completely online, there’s no requirement of physical presence), and they are courses (there is a syllable, lectures, quizzes, group assignments etc.).

Secondly, Gundersen stated in the interview that:

“In relation to funding the project it’s smart to use the term MOOC, because there’s a huge hype and it has created a lot of interest. We can see that when we are out there meeting relevant stakeholders. It sounds sexier than “e-learning” even though, in principle, it’s the same” (Interview with Gundersen, 2014).
So as for getting funding it seems easier to get external actors to co-fund MOOC projects, simply by using the term MOOC, as seen in the example with UCZ. It is hard to say if they would have gotten the funding or not if they had called the project an “e-learning” project, but something indicates that it’s easier to get external funding for a MOOC project, because of the hype surrounding MOOCs. So the hype itself is helping MOOC projects to get funding and perhaps also success. Even though the solution might have existed already, but back then it was called e-learning.

As for applying social capital to try and discuss how the MOOCs may lift the region, it proved useful when also relying on Coleman’s idea to look at the outcomes, and the general advice from literature, that it shall be seen as a process, that is best analyzed via qualitative methods. This previously used quote by Malecki, stating that “social capital is central to the development of regions; while hard to identify and challenging to measure, its effects are visible in many ways” (Malecki, 2012, p. 1033) shall then serve as the concluding remark to the discussion of how MOOCs can lift a region.

In the next section it will be briefly discussed if this knowledge created from the analysis of the UCZ case can be applied to other EU regions, and if MOOCs in general can be said to be a useful tool for the EU, to reach specific policy goals.

5.3.1 MOOCs as a Policy Tool for the EU
The EU is actively using MOOCs in their education policy, via the OpenupEd platform, which is used to reflect European values and where the members share a commitment to meet “the needs of the economy, culture and civil society in Europe at regional, national and pan-European levels.” (OpenupEd, 2014). Also, by supporting the UCZ project, with a fund in which the purpose is “to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions“ (European Commission, 2014) the EU is also using MOOCs indirectly in their development policy.

From the analysis we then know that MOOCs provide a potential for gaining social capital, as seen with the UCZ project. From the theory, we know that education has an impact on social capital, and we know that social capital matters for regions, in that it can mean a spiral of economic development.

MOOCs in this sense then do seem to be a tool to “strengthen economic and social cohesion” in EU regions, which is the goal of the development fund (European Commission, 2014) one could
The Potential in MOOCs

did therefore believe that MOOCs could be a general method for EU regions to reach social capital. However, Malecki has argued that:

“As a regional personality trait, however, it is difficult if not impossible to imitate one region’s social capital process in other places. Social capital is a unique, locally specific process.”


Further Lundvall et al., argues that social capital is rather intangible and hard to reproduce, which presents a challenge for actors who aims at creating policies to actively generate social capital (Lundvall, Johnson, Andersen, & Dalum, 2002, p. 228).

The direct transferability and possibility to recreate social capital in other EU regions, with a MOOC project similar to the UCZ case, is therefore not that straightforward and will depend on many external and internal factors in the region. However this thesis will argue that the UCZ case, co-funded by the EU, presents a potential that can indirectly contribute to fulfilling the EU development policy, even though it may be challenging to actively use it as a general policy tool on a broader EU level.

As for MOOCs as a tool for educational policy, it seems more straightforward to use it actively, as the EU is also doing with the EADTU and the OpenupEd MOOC platform. But if this will work, is a discussion of the educational potential in MOOCs in general and will be a matter of the success of OpenupEd. A wider discussion, that is beyond the scope of this thesis, but which falls back to the pedagogical discussion that are also currently ongoing in the MOOC literature.

The following chapter, which is also the third and last case study, will look at MOOCs from a different perspective since it is an exploratory discussion of the nature of MOOCs.

**Chapter 6: The Disruptive Potential in MOOCs and How to Approach Them**

In the former two case studies, it was discussed how MOOCs can provide a potential for universities and university colleges in reaching strategic goals and at the same time also function as a tool to reach policy goals at EU level and at a Danish level. In this case, it will then be discussed what implications MOOCs can have on the general education market, by applying a concept called disruptive technology to MOOCs. Further it will be discussed how a university, that does not yet offer MOOCs, should approach MOOCs, according to the theory of disruptive technology.
6.1 Disruptive Technology

In his 1997 Book “The Innovator’s Dilemma: When New Technologies Cause Great Firms to Fail” (Christensen C. , 1997) Associate Harvard Professor Clayton Christensen provides a three-part “failure framework” for why some firms fails when new technologies emerge. The first part of the framework is a distinction between two kinds of technology; sustaining and disruptive technology (Christensen, 1997, p. 10).

Sustaining technology is, according to Christensen, technology which seeks to improve already established products (e.g. statements seen on product labels such as “longer battery time”, “improved recipe” etc.) and they do so in coherence with what the company believes the existing customers will value. He also claims that most new technology that is developed in any given market is of this kind (Christensen, 1997, p. 10).

Disruptive technology, on the other hand, is products that on the short term seems to be a product with a worse performance than the existing alike product, however on the long term the features of the disrupting technology ends up creating a value to new customers. Such products are according to Christensen “typically cheaper, simpler, smaller, and, frequently, more convenient to use” (Christensen, 1997, p. 11).

The second part of the framework is an argument that technologies tend to emerge faster than the market demand, which means that companies tend to overshoot the market, meaning that in the strive for market shares and competitive advantages they end up improving a product with a feature that the customers don’t have a demand for, or will not pay for. And this is where the disruptive technology comes into play, because what is seen as a product that has little demand from customers today may be very competitive and highly demanded tomorrow (Christensen, 1997, p. 11).

The third part of the framework is that it is very difficult for established companies to invest correctly in these technologies for three reasons.

Firstly, because disruptive products are usually simpler and cheaper than the established product, it creates lower margins instead of greater profit. Secondly, because they usually are developed in

\[\text{Margin} = \text{Sales Price} - \text{Cost of Production}\]

Margin is the difference between the sales price of the product and the cost of producing the product, the margin is thus what the company actually earns per sold item. Business operating with a low margin model often means that a company produces and sells at a low price, but sells more and has a high turnover. A high margin model will usually mean that a company earns more per item but sells less, since it costs more. So, small margin usually means high
insignificant markets, they can be hard to spot for the established companies. Thirdly, because the users of the established products do not have much use for the disruptive products, there will be a bigger profit for the companies in just staying with their existing user base, instead of trying to reach a new group that are not very profitable to start with (Christensen, 1997, p. 12). Therefore, when the disruptive product have finally emerged and gained market shares and profit, it is often too late for the established companies to invest in it. As Christensen puts it:

“As a result, these companies find it very difficult to invest adequate resources in disruptive technologies—lower-margin opportunities that their customers don’t want—until their customers want them. And by then it is too late.” (Christensen, 1997, p. 12).

Lastly, the perhaps most important feature of the disruptive technology is that they typically enable new markets to emerge, because they create new demands from the consumers (Christensen, 1997, p. 14).

Since the book came out the term disruptive technology has been widely adopted and accepted, but this has also meant that the term has been overused, misused or just transformed from Christensen’s original idea (see for example (Yglesias, 2013)) therefore he has tried to clarify the term in a 2012 interview with the Harvard Business Review Youtube channel. In the interview he states that:

"Disruptive technology is not a breakthrough innovation that makes good products somewhat better, but it has a very specific definition that is; it transforms a product that historically was so expensive and complicated that only few people had access to it, a disruptive technology makes it so much more affordable and accessible that a much larger population have access to it” (Christensen, 2012).

It is quite difficult to find substantial critique of this theory, in fact the most easy critique to find is a rather paradoxical critique of there not being a critique of the theory, as education-technology blogger Audrey Watters puts it “it’s as if The Innovator’s Dilemma were some sort of sacred text” (Watters, 2013A). In this blog post Watters then tries to puncture what she calls “the myth” of Christensen. However the critique is not as much on the actual framework, but more on its different applications by Christensen and others, who have used the theory. A critique that is also related to turnover and less profit per item, whereas large margin means low turnover but high profit per item (Bass, 2015). Which is probably why Christensen argues that an investment in disruptive technology will rarely prove to be profitable for established companies, since the profit per item in general is low from these products.

Surname, Initial. (Year). Title of book. Publisher.
Yglesias’ statements, that it has become a wide stretched term, that seems easy to apply, but which has been misused in some contexts (Yglesias, 2013). The critique then is more a reminder on not to use the theory too eagerly, rather than identifying flaws in the model.

This disruptive technology theory provides an interesting framework that applies to firms, organization and managers in regards to how to approach and deal with new innovations and technologies. Further, the theory can be used to identify features of a disruptive technology that, as will be argued in the next section, also seem to apply to MOOCs.

6.1.1 MOOCs as a Disruptive Technology

“I like to call this the year of disruption and the year is not over yet”-Anant Agarwal, President of edX in (Pappano, 2012).

According to Christensen there are two forms of innovative technologies, as described above. One form is sustaining and the other is disruptive. By applying these concepts to MOOCs, it can be argued that MOOCs itself could fit into both categories. One could argue that MOOCs are a product which are improving an established product and thus are sustaining, in accordance to the theory. But with a closer look into the function of MOOCs, as for example done in case 1 and 2 in this thesis, one could also argue that MOOCs:

“Transforms a product that historically was so expensive and complicated that only few people had access to it and makes it so much more affordable and accessible that a much larger population have access to it” (Christensen, 2012) as Christensen defined disruptive technology.

For MOOCs, the above scenario, seems to be the case in the way that it makes education free and gives more people access to it, at least if viewed from the perspective of the MOOC supporters. So, according to Christensen’s definition, MOOCs thereby seems to fit the category of disruptive rather than sustaining technology.

That MOOCs falls into the disruptive category in Christensen’s theory has also been argued by Michael Horn and Clayton Christensen himself, with the statement that MOOCs “bear the early hallmarks of a disruptive technology” because it moves up market, it serves non customers and it redefines quality (Horn & Christensen, 2013). Also, in an analysis from 2013 Yuan and Powell state that “MOOCs contain key characteristics of disruptive technology, i.e., a combination of new business models with an enabling technology” (Yuan & Powell, 2013, p. 13).
There are however also articles claiming that MOOCs should not be viewed as a disruptive theory, but rather as a “disturbing invention” such as (De Langen & Van den Bosch, 2013) who in Their 2013 article, which is a response to Horn and Christensen, concludes that “The general conclusion is that MOOCs are not a disruptive technology in the sense that Christensen described in several of his publications” (De Langen & Van den Bosch, 2013, p. 224).

Their arguments are mainly that MOOCs will not replace traditional education and can therefore not be seen as disruptive because it is not able to; conquer the low end of the market, improve quality towards industry standards or replace existing organizations (all three are necessary stages in Christensen’s elaborated theory) (De Langen & Van den Bosch, 2013, p. 224).

In response to De Langen and Van den Bosch, this thesis will however argue that it is still too early to conclude on the disruptive potential in MOOCs. Therefore, since we are not yet able to look back at MOOCs to see what it may/may not have disrupted, MOOCs will be perceived as potentially disruptive in this thesis. This is mainly for analytical purposes, because viewing MOOCs as disruptive enables this thesis to put another layer to the discussion of the potential in MOOCs that can then be analyzed and explored further.

In the next section the future disruptive potential in MOOCs will therefore be discussed, using different case studies and articles, which tries to predict what MOOCs might disrupt, these will be supported with statements from the interviews used in the previous cases.

6.1.2 Possible MOOC Disruptions

“The early decades of this second millennium may bring more changes to universities than their first thousand years. Some of these changes will be wrenching” (Casper, 1995).

As argued in the literature review, one of the main statements from the positive MOOC side is that MOOCs have the potential to democratize education and that it gives everyone access to free education e.g. (Koller, 2012). But this statement has been rebutted by the more critical side, saying that it will not happen as long as one does not get credit for the MOOCs and as long as employers will not accept MOOCs. It therefore seems that, without the credit or official course diplomas, MOOCs will not yet be able to replace regular university courses (Ong & Grigoryan, 2015, p. 376).

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12 Meaning the second millennium in which universities have existed, as elaborated in the speech by Gerhard Casper "the third millennium AD will begin, it actually will be, permitting for some rounding up, only the second for universities" (Casper, 1995).
There is however indicators that shows that this may change, since some MOOCs have been rewarded credit in the United States (Coursera, 2013), which means that those specific MOOCs can then be accepted by universities as a pre-requisite course. Also, the first full degree master programme are now being offered via MOOCs, when Georgia Tech and Udacity made a collaboration to offer an online master degree in Computer Science -“the first of its kind delivered through a MOOC platform” (Udacity, 2015). On the MOOC platform Udacity, you can now take and complete all the courses in the master programme without applying for admission or paying tuition. You do however have to pay 7000 dollars in tuition fee if you want the credit and official graduation papers from Georgia Tech, further you must have an access-giving bachelor of science (Udacity, 2015).

It therefore seems that there are indications that MOOCs are on the way to either replace university degrees in some cases, or at least make up a free equivalent, available to everyone. The first MOOC market interruption could therefore be:

University degrees and regular university courses can be replaced by MOOCs

This will however only happen if either more institutions begin to offer MOOCs with official credit ore if more employers will accept MOOCs without the official credit, as also argued by Ong and Grigoryan (Ong & Grigoryan, 2015, p. 376). There are however indications that this is beginning to happen, at least according to a report from 2014 (Radford, Robles, & Cataylo, 2014) where a number of employers in North Carolina where asked about their position towards MOOCs. This report concludes that; 57 percent of all organizations in the survey could see themselves using MOOCs for recruitment and while degrees are yet a necessary qualification for jobs, employers tends to view MOOC course taking as an indication of greater motivation for a job. 73 percent of the employers further viewed MOOCs very positively or positively, with respect to their potential influence in hiring (Radford, Robles, & Cataylo, 2014, p. 3).

So, as for the question of if MOOCs can replace university degrees, it seems to be up to the employers, as Jim Donohue13 formulated it in an interview with the Guardian “Eventually employers will decide how valuable MOOCs are” (Tickle, 2014), and there are indications showing

13 Chief Product Officer at a leading provider of innovative teaching, learning and research solutions for the academic, professional and library markets worldwide (Tickle, 2014).
that employers are putting more and more value into them, as seen in the Radford report (Radford, Robles, & Cataylo, 2014, p. 3).

The future implications if this happen, could then be that the universities are undermining themselves by offering MOOCs, as Tønnesen formulated it in the expert interview:

”What the employers are acknowledging is that they need competences, so if I can prove that I have this competence and if they do not care about the exams and accreditation, then what will happen to our society, when we no longer need the university certificate to get a job, because we just have to prove that we know our stuff in any way, then how do know who is capable of what? That could be through personal references” (Interview with Tønnesen, 2014).

And further she added that:

“it could make some universities to hesitate to offer MOOCs, because they are undermining themselves, they remove their own basis for existence, for what now when the universities can no longer make money on exam certificates, then what is their basis for existence? Yeah they do research and science, to spread their knowledge to the whole wide world, but others might as well do that?...to overstate things a bit” (Interview with Tønnesen, 2014).

Tønnesen reflected upon what it could mean for Danish society this way:

“Could the state then not just stop paying for our education, because when the employers don’t need a certificate anyways to hire you, then it could become and obvious expenditure cut-down, but let us hope we have some socially responsible politicians..and I don’t think this will today or tomorrow…” (Interview with Tønnesen, 2014).

Some of these claims are clearly overstatements and, as Tønnesen also said, not likely to happen tomorrow. It is however an interesting notion and could be a consequence, if the employers start accepting MOOCs on the same terms as they accept degree certificates. A possible paradox would then be that the universities are undermining themselves by offering MOOCs for free. One could also argue that, before such radical changes will occur, the universities, if they follow the development somewhat, would either just stop offering MOOCs or make changes to them, so that this would not happen. But it may still mean that the universities at that time has already opened the door for new entrants to the market of education, and if MOOCs are getting more accepted by
employers, it could then also open up for another possible interruption, that of the professional training and skill development market. Another possible future MOOC disruption is therefore:

The market of Training, re-training and professional development

David Savino argues in a 2013 article that it is inevitable that MOOCs will also become important in corporate learning and development, but he also argues that while universities are hyping MOOCs and paying a lot of interest in it, companies have not to the same degree been appreciating the potential in MOOCs, when it comes to developing their employees. Savino further claims that since the 2011 US recession, companies have not invested much in skill development of their employees, there therefore seems to be a need for skill development that MOOCs may be able to fulfill (Savino, 2014, p. 60). This argument is supported by Mark McGraw (McGraw, 2013) who is claiming that according to research, MOOCs will play a larger role in employee development in the future. An argument he is deriving from a research made by Future Workplace\textsuperscript{14} showing that

\begin{quote}
“72 percent of respondents said that they see an opportunity for their learning and development departments to integrate MOOCs into their current learning programs” (McGraw, 2013).
\end{quote}

Further, according to Jeanne Meister (Meister, 2013), there are specifically three areas of MOOCs, which makes it useful for employee development from the companies’ point of view, these are; The design of MOOCs, which is often semi-synchronous, provides learners the opportunity to motivate each other as they go through the program. Secondly, the design of most MOOCs means that MOOC takers must apply their new knowledge to role-plays, cases studies and exercises, they thus gets practical- not just academic exercise. Thirdly, the fact that many MOOCs offer college credit or certificates of completion, helps to legitimize the learning, Meister therefore argues that “certificates function as an incentive for employees to complete optional training or skill development courses, because they’ll have something to show for all their work” (Meister, 2013).

In the expert interview Tønnesen commented on the possible impact on the professional development market this way:

\textsuperscript{14}It has not been possible to track down the actual report but Meister and McGraw are both referring to the results in (Meister, 2013) and (McGraw, 2013), though without a direct reference to the actual report, and it has not been possible to find it via library databases or search engines, it may therefore not be publicly published.
“When my colleagues are addressing our employer to ask for further education or retraining, they ask for a MOOC, they do not ask for a specific costly course or seminar, and our employer will say yes of course, because he will only have to pay for the work hours it takes since there’s no fee for the course…. and if the employees and employers can get what they need from a MOOC, and they are beginning to- because there’s so many of them, then the employers won’t use the professional training center anymore“ (Interview with Tønnesen, 2014).

This implies that there is a certain threat for the training centers and the universities which offer retraining and general professional development courses. But if the MOOCs become more widely accepted there is also a rising demand in development and retraining courses via MOOCs, a possibility that then also opens the door for professional development companies to make collaborations with MOOC providers, to make non-university development MOOCs. This could then mean that universities could lose territory on the MOOC platforms to professional companies that offer development courses.

Another and quite different disruption is related to the rising popularity of MOOCs amongst students, which gives a positive attention towards the professors and Phd. students, that are typically running the MOOCs. One of the allegedly most popular business MOOC courses of 2014 had at least 110.000 students signed up (Girard, 2014), which presents the MOOC lecturers to a massive crowd. If they are successful with their MOOCs, this could ultimately give them more status. Another MOOC disruption could therefore be:

The status of professors and Phd. Students

This was also one of the main reasons for Hanne Jarmer to persuade her management at DTU to introduce MOOCs, as she said:

“..I thought, how can it be as prestigious to teach as it is to research? This was one of the most important reasons, that I had seen that the lecturers at Coursera personally got a lot of PR, they were stars, I could see that it could be a way to help my lecturers to get something more from being a good lecturer.” (Interview with Jarmer, 2014).

Further, in Korea, Michael Sande, the professor behind a popular edX MOOC on justice, was asked to “throw out the ceremonial first pitch at a professional baseball game” after his MOOC had been translated into Korean and shown on national television (Friedman T. , 2013B). This MOOC also
became very popular in China, which made the newspaper The China Daily to compare Sande’s fame in China, to that otherwise belonging to Hollywood actors and professional Basketball players (Friedman T. , 2013B). But, as Thomas Friedman correctly observes, this will of course not happen to any given MOOC professor, but still the case of Michael Sande leads Friedman to argue that:

“The world of MOOCs is creating a competition that will force every professor to improve his or her pedagogy or face an online competitor” (Friedman T. , 2013B).

At first sight this is mostly related to socio-economic factors, such as it could become more prestigious to become a professor, which is not directly disrupting the market as such. But if the current professors get a higher status amongst the students and colleagues, via a popular MOOC, it could lead to higher job satisfactions which could then lead to better students and learning outcomes and a general rise for the university. The extreme consequence could then be a disruption of the employment market and could change the way we perceive the profession of professors, lecturers and Phd. students.

On the contrary it could be argued that the MOOCs are popular because the professors are also popular to start with, this could arguably be the case with the before mentioned 2014 course with 110.000 MOOC takers, because it is run by a former Yale nobel prize winner (Girard, 2014). But MOOCs could still provide not-so-famous-professors and Phd. students with an opportunity to become more known, as in the case with Sande, who was almost treated as a rockstar in Korea and China.

The last possible future disruption that will be mentioned in this discussion are:

Decline of branch campuses

Branch campuses are otherwise a trend that has been rising, in 2009 University World News stated that “the number has almost doubled to 162 in the past three years alone and has jumped eight-fold since 2002” (Maslen, 2009). This has however led Phillip Altbach (Altbach, 2011) to talk about “a bubble” in branch campuses that may burst. He is referring to that high expectations from both sides, intercultural misunderstandings and not planning ahead has lead to failure in the past, exemplified by 20 US universities who set up branch campuses in Japan in the 80’s, where now

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15 Campuses set up by universities in other countries than their home country (Maslen, 2009). For example the University of Nottingham, which has a physical campus in Malaysia (The University of Nottingham, 2015).
only two of them remains (Altbach, 2011). Nevertheless, some of the main reasons for universities to build branch campuses abroad are according to Geoff Maslen (Maslen, 2009) to attract more international students, and thereby more tuition fees, to get more brand awareness and international visibility. In sum universities building branch campuses are seeking to get a “competitive edge in the global higher education market” (Maslen, 2009).

However, as also argued in case 1, MOOCs also seem to be able to provide some of these features, in the way that universities can gain valuable symbolic capital via MOOCs (brand awareness, visibility, attracting international students etc.), MOOCs may therefore become a competitor or replacement for branch campuses, since they serve the same purpose. That MOOCs may be a competitor to branch campuses has also been observed by Rahul Choudaha (Choudaha, 2012) who argues that:

“Branch campuses are not going away in the short term, especially the ones that have been in existence for a while. However, newer branch campuses will face unexpected competition from MOOCs” (Choudaha, 2012).

The implications of this, if the “bubble” bursts and international branch campuses are replaced by MOOCs instead, could be that universities are getting almost the same outcome from MOOCs than from branch campuses, but at a lower cost and without the risks of setting up a branch campus, which may fail because of intercultural misunderstandings, poor planning, too high expectations etc.
Below is a table summarizing the above discussed possible MOOC disruptions.

<table>
<thead>
<tr>
<th>Interrupted product</th>
<th>Indicators for</th>
<th>Indicators against</th>
<th>Possible implications</th>
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<tbody>
<tr>
<td>Regular university courses</td>
<td>More employees are accepting and recognizing MOOCs.</td>
<td>General low credibility in MOOC courses and if credit is given do employers recognize them?</td>
<td>Loss of knowledge monopoly -&gt; market opening for other entries.</td>
</tr>
<tr>
<td>Professional development and training courses</td>
<td>A demand in professional development from employers and employees.</td>
<td>There may be credibility issues since employers might demand to see a certificate, which not all MOOCs provide.</td>
<td>Professional companies collaborates with MOOC providers -&gt; possible threat for those making money on development courses today (including some universities).</td>
</tr>
<tr>
<td>Status of Professors</td>
<td>Professors and PhD.’s is on a global massive stage in the popular MOOCs, which could lead to “fame” and status.</td>
<td>Those who are already famous become more famous, MOOCs are only popular because of already famous professors, not the other way around.</td>
<td>Higher job satisfaction which leads to better performance which could lead to a better learning outcome for the students and eventually lift the university and general status of the profession of teaching.</td>
</tr>
<tr>
<td>Branch Campus</td>
<td>MOOCs offers the same features as branch campuses.</td>
<td>Some branch campuses will be too well established for MOOCs to poses a competition threat.</td>
<td>Huge cost reduction with the potential of the somewhat same outcome.</td>
</tr>
</tbody>
</table>

Table 6: MOOC Disruptions

Though not included in the above discussion, Lawton and Katsomitros’ conclusion to their 2012 analysis of the future MOOC disruption is worth mentioning, they argue that:

“The most far-reaching impact of MOOCs may be pedagogical rather than in relation to internationalization strategies and recruitment.” (Lawton & Katsomitros, 2012, p. 9).

An argument that refers back to the pedagogical discussion of the potential in MOOCs that will not be touched further, but is yet worth mentioning since it implies a possible disruption in the way university courses are taught, as according to for example Lawton and Katsomitros (Lawton & Katsomitros, 2012).

It is however also possible to find those who argues that MOOCs have not disrupted anything. In an opinion essay published on the website Edsurge.com, Leah Belsky and Michal Tsur (Belsky & Tsur, 2014) argue that MOOCs have not changed the way knowledge is assessed and credentialized, they have not increased access to knowledge or shifted the focal point of knowledge, as “promised” by the MOOC supporters. According to them, MOOCs should therefore not be seen as disruptive.
(Belsky & Tsur, 2014). However, their conclusion seems a bit premature, since it is still early to conclude on what MOOCs have and have not disrupted, and as discussed above there is indicators that MOOCs may still possess a future disruptive potential in certain areas.

Since it is indeed challenging to predict the future, there are obviously numerous areas and fields that MOOCs could possibly disrupt, which haven’t been mentioned here. But, the above scenarios seems to be the sum of the articles and case studies found, concerning the disruptive nature of MOOCs along with the expert interview made for this thesis. It is therefore argued that MOOCs seem to have a disruptive nature when applying them to the theory founded by Clayton Christensen, but only time will tell what MOOCs will in fact disrupt (if MOOCs as we know them even exist long enough to disrupt anything, that is).

Having argued how MOOCs may be classified as a disruptive technology and from there discussed what markets MOOCs might then disrupt in the future, the next section will look into what the implications are, for an organization who wants to deal with disruptive technology (i.e. MOOCs).

6.3 Approaching MOOCs
By applying a theory called Catch the Wave, which tries to explain how companies should successfully approach a disruptive technology, to a case study of a prospect MOOC university, namely Aarhus University, this section will seek to establish an understanding of what the theoretic and practical implications are for universities who wants to offer MOOCs, if the idea of MOOCs as a disruptive technology is followed.

The forthcoming discussion serves as a useful way to conclude and put the exploration of the potential in MOOCs into perspective, in the way that it lays the final layer to the wider understanding of the potential in MOOCs, which is how to possibly approach it, in order to harness this potential.

Firstly will follow a description of how disruptive technology should be approached, according to Joseph Bower and Clayton Christensen. This will be followed by a discussion of the situation at the faculty of Science and Technology at Aarhus University (AU ST) and how this theory could then apply to AU ST.

6.3.1 Catch the Wave: How to Approach a Disruptive Technology
Apart from defining the nature and differences between the sustaining and disruptive technology, Christensen also provides a framework for how managers should approach disruptive technology, he does so with Joseph Bower in a theory they call Catch the Wave (Bower & Christensen, 1995).
The Potential in MOOCs

This theory is interesting because, having argued that MOOCs may be classified as disruptive, Bower and Christensen’s framework for how to approach it, would then also apply to prospect universities that are looking into offering MOOCs.

According to Bower and Christensen, ideas to the management in organization and companies about new developments, or ideas for investment, often take place at the lower levels in an organization, such as in working groups and project teams, from there the management in the organizations will then select which ideas to develop or invest in (Bower & Christensen, 1995, p. 47).

When the managers have chosen to go with an idea to look into developing a new product using new technology, there are five steps in the theory, to how managers should successfully approach this idea. Firstly, managers must determine whether the technology is disruptive or sustaining (Bower & Christensen, 1995, p. 49). Secondly, a company should define the strategic significance of the disruptive technology (Bower & Christensen, 1995, p. 49). When this is done they must locate the initial market of the disruptive technology (Bower & Christensen, 1995, p. 50). Fourthly, when it is decided to develop a product that relies on disruptive technology, they should place responsibility of building a disruptive technology business in an independent environment and lastly they must keep the disruptive organization independent (Bower & Christensen, 1995, p. 52). The next section will then apply this framework to AU SU in order to get a wider understanding of how MOOCs should be approached and the usability of the theory.

6.3.2 Case: Catching the Wave at Aarhus University
AU ST has been chosen as a case for this analysis, because they do not yet offer MOOCs and because they have created a working group that are looking into the possibilities and potential in MOOCs for AU ST. The groups’ purpose is to come up with a proposal for the management about if and how the faculty should proceed with a MOOC project (Sand, 2013).

So, the fact that they have shown interest in MOOCs but have not yet decided whether or not to do it, makes it an interesting case to apply to the theory of disruptive technology in a discussion of what they should potentially be aware of before and when making the decision to, or not to start offering MOOCs. To give more insight into the considerations of the work of the group, member of the working group and head of Department of Engineering at AU, Thomas Toftegaard was interviewed.
In the interview he explained the background for the working group this way:

“At our faculty, Science and Technology, we have been in a process where we have formed a working group, that has broadly looked at, what is this thing, but we’ve been less focused on Denmark and more globally oriented, so we have looked into, who is doing what, what is the content and observed the development. Our purpose is to give inputs to what we think about all this in regards to the process of MOOCs” (Interview with Toftegaard, 2014).

This statement fits well with the argument from Bower and Christensen, that ideas for further investment often occurs in working groups at lower levels. In this case it is a working group at AU who is created in order to make a proposal to the management.

Regarding Toftegaard’s considerations on MOOCs he expressed his view this way:

“I believe in it! I think it is necessary to become a part of it, because that means creating a brand that we are elite, young, visionary and an on-the-beat university with a deep subject knowledge. Those universities who is in on this are top universities all the way, so you will also become part of a network” (Interview with Toftegaard, 2014).

A statement he elaborated his way:

“The considerations right now are how much do we believe in this, from an offensive scenario about how can we use this to brand ourselves and actually offer something completely new to someone completely new to us, but also from a defensive point of view; how can we avoid losing ground? But that is very difficult to conclude on” (Interview with Toftegaard, 2014).

So, as for the first steps in the five step framework, which is to identify if the product is disruptive or sustaining, it has already been argued that MOOCs have features of disruptive technology. Regarding the next step; to define the strategic significance of the disruptive technology, it seems that in the working group there’s little doubt about the potential and strategic importance in MOOCs, as seen in the above quotes from Toftegaard. However, he also stated that:

“All the strategic decisions should be linked to a business case, if we do this and that it will cost us this much and then you have to find that money somewhere, but that applies to everything. So there is no difference there, and we know how to do that, but it comes down to a matter of prioritizing no
matter what level it is. You must not fool yourself and think that it won’t cost you, because it will and no matter what it is, you need to find the money for it” (Interview with Toftegaard, 2014).

So, the group seems very aware of the strategic significance, but they are also aware that there must be a sound business plan before they should start offering MOOCs, which was further explained this way:

“..one strategy is to say ”we need to do this no matter the cost” and that is not the strategy we have chosen, so to say” (Interview with Toftegaard, 2014) and he further stated “we are not interested in making completely dynamic decisions about things we don’t know the consequences of or know anything about. We have a certain level as a university and we want to keep that level, so we cannot fluctuate with everything that is trending, there is a balance you have to find” (Interview with Toftegaard, 2014).

Asked whether or not he believed it could be harmful to not offer MOOCs he answered that:

"I am not so sure that anything will happen from not doing it, but that is a tough question to answer, I am not so sure it is critical to not do it, to be honest we are in a conservative field after all, but it is very hard to predict” (Interview with Toftegaard, 2014).

It seems that the group has not yet made a final decision about what the proposal should be to the management. But if we follow the five steps of Bower and Christensen, it has been identified whether the technology is disruptive or sustaining, where it was argued in the previous analysis that it may very well be disruptive. The group has then defined the strategic significance of the disruptive technology, as summarized with this quote “there are all kinds of possibilities in it, they are not hard to see” (Interview with Toftegaard, 2014). As for the third step, which is to locate the initial market of the disruptive technology they have already made some considerations, as seen in these statements from Toftegaard “offer something completely new to someone completely new” and ”we’ve been less focused on Denmark and more globally oriented” (Interview with Toftegaard, 2014).

The working group at AU ST has thus already moved past the first three steps in the framework, so if the group decides to recommend the management at AU ST that it is a good idea to start offering MOOCs, it is according to the theory then left to the management to place responsibility of building
a disruptive technology business in an independent environment and to keep the disruptive organization independent (Bower & Christensen, 1995, p. 52).

In the MOOC world there are examples of universities who has followed these steps (consciously or not) and made the MOOCs in independent environments, for example MITx (MITx, 2015) and HarvardX (HarvardX A, 2015), which are MOOC sub-departments of the famous universities MIT and Harvard and which are developing MOOCs for the two universities’ joint MOOC platform edX.

But there are also examples of successful MOOC universities which have not done so, as seen with for example DTU and CBS. Where, from the interviews at least, there are no indications showing that they have made independent MOOC departments, yet they seem successful with their MOOC projects.

So as for the reliability of the theory, it seems that universities can also be successful without following Christensen’s five steps in every sense. Therefore it seems likely that AU could also succeed with MOOCs, without following the last two steps in the five step framework. That is if they can find the right business model for it, since this seems to be a necessary condition for AU ST, as according to Toftegaard.

Regardless of this, the theory can be useful to apply to MOOCs, because it shows that there are some considerations that should be made before a university decides to offer MOOCs, if they are to succeed and harvest the diverse and broad potential in MOOCs.

The Catch the Wave theory by Bower and Christensen is however probably more useful to use as framework and a reminder of what should be considered rather than as a static model that must be followed in every sense.

Having explored the potential in MOOCs theoretically and empirically from three rather different angels, it is now possible to conclude on the findings.
Chapter 7: Conclusion

“I think MOOCs have a huge potential. The technology that allows one professor to teach not just one student, but 100,000 really changes the economics of higher education” - Andrew Ng, Coursera co-founder in (Grossman, 2013)

The popularity of MOOCs means that they have gotten a lot of attention from universities, media, academia and persons interested in education. It is therefore not hard to find both positive and negative MOOC literature, but there seems to be a trend towards criticizing MOOCs, rather than supporting them. In order to try and understand this rise of negative MOOC literature this thesis therefore looked at the nature of hype through Gartner’s Hype Cycle model, which includes five steps in the hype of a new technology or innovation. By applying this model to MOOCs it is argued that the model can be a tool to understand the general MOOC hype and explain the rise of critical MOOC literature.

In spite of the rather big academic field within MOOCs, there seems to be a lack of literature dealing with MOOCs from a strategic and political perspective.

The aim of this thesis was therefore to contribute to the discussion of the different ways MOOCs offer a potential as a strategic and political tool and its potential to have a disruptive effect on the educational market. This was done through three different case studies.

Firstly, it was explored how MOOCs present a potential to benefit Danish universities and on the same time how it can be used to fulfill specific Danish government policies. This was done via applying the theory of gift giving and symbolic capital to the case of two Danish universities that are currently offering MOOCs. Secondly, it was analyzed in what ways MOOCs present a potential to lift a region and how it at the same time can be a tool to fulfill specific EU policy goals. In order to do so, the theory of social capital was applied to the case of University College Zealand and their EU funded regional MOOC project Learning Without Borders. Thirdly, by applying the theory of disruptive technology to MOOCs, it was explored in what ways MOOCs present a potential to disrupt the education market. Further, by applying a theory called Catch the Wave to Aarhus University, it was discussed what strategic considerations universities should make before deciding whether or not to offer MOOCs.
The three case studies combined present an overall picture of the potential in MOOCs when they are used and analyzed with a strategic and political perspective. It is argued that MOOCs have a potential to give universities more symbolic capital, which will benefit their international competitiveness and further it has a potential to be used as a policy tool, in order to reach political internationalization goals in Denmark.

MOOCs also present a potential to indirectly give a geographic region more accumulated social capital, through a higher education level, which can then benefit the region in general. At the same time, MOOCs have a potential to act as a tool to reach specific policy goals in the EU’s regional development and education policies.

Lastly the case studies show that MOOCs present a potential to disrupt the education market in a range of different ways. Further, because MOOCs can be seen as a disruptive technology, it has some strategic implications for universities offering, or on the verge to start offering MOOCs.

Since this is a rather new field it shall be interesting to follow the development of MOOCs. It will be especially interesting to see if MOOCs will become more actively used strategically and politically by the different actors, since MOOCs arguably contains a potential within this field.
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The Potential in MOOCs


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The Potential in MOOCs


Appendix A: Interview Guide for Thomas Toftegaard, Science and Technology Aarhus University

Background
Thomas Toftegaard is Head of Department of Engineering at the faculty of Science and Technology at Aarhus University (AU ST), and a member of a working group looking at MOOCs and the possibility for AU ST to start making them. The interview was made at Thomas’ office in October 2014.

Interview Guide
Can you tell me about the MOOC working group, what are the purpose and the goals of the group?

What ideas and considerations are there in the group right now?

What do you believe AU ST could achieve from offering MOOCS? (I.e. attract students, branding, reputation, international acknowledgements)

What do you think could happen from not offering MOOCs? Could it harm AU?

How do you collaborate with the management? Can you describe the decision procedures and lines of communication regarding the group and the management at AU ST?

Is the group thinking in terms of strategies? Is it your impression that the management is thinking in terms of strategic goals, when it comes to MOOCS?

Are there any expectations from the management regarding a profit in any form (i.e economically or reputational)?

Do you have any thought on what the MOOC takers might be able to give AU? (reputation, branding, economy in terms of tuition fee etc.)

Have the group considered the commercial possibilities in MOOCs in general, from you knowledge is it then something the management demands? What role do the economic aspects have at this point?

Have you looked at other universities and what they have done? How have you in general tried to get experience and knowledge about MOOCs?

What is the time perspective for the working group?

Do you know about any other MOOC related projects taking place right at AU?
Appendix B: Interview Guide for Wilbert van der Meer, Copenhagen Business School

Background
Wilbert van der Meer is director of Dean of Educations’ Office at Copenhagen Business School (CBS), which has offered MOOCs via Coursera since 2014 (they announced their partnership with Coursera in 2013). Though the second in Denmark to make an agreement with Coursera (after DTU), CBS was the first to actually launch MOOCs via Coursera. The interview was made via phone in October 2014.

Interview Guide

Why do you offer MOOCs?

What were the strategic considerations behind this decision?

Did you consider any specific strategic goals (i.e. branding, attract students etc.) that MOOCs might help to reach?

Was it perceived as a necessity for CBS to start making MOOCs/ were you nervous for the consequences of not doing it?

What expectations did you have before launching the first MOOC?

Are there any expectations from the management in terms of getting a profit or return in any form?

What do you expect that the MOOC takers can give CBS? (reputation, pr, international environment, more fee paying students etc.)

What have CBS gotten out of it so far?

What have the challenges been from when you decided to offer MOOCs till the actual launch of your Coursera MOOCs? And what are the challenges right now?

Is it your impression that there are a lot of prestige connected to being a MOOC offering university in terms of networking with other universities and how they perceive CBS?
Appendix C: Interview Guide for Hanne Jarmer, Danish Technological University

Background
Hanne Jarmer is Associate Professor at Department of Systems Biology at Danish Technological University (DTU) she took contact to Coursera when DTU decided to pursue the idea of offering MOOCs. The interview was made via phone in November 2014.

Interview Guide
Why do you offer MOOCs?
What were the strategic considerations behind this decision?
Did you consider any specific strategic goals (i.e. branding, attract students etc.) that MOOCs might help to reach?
How did you consider MOOCs in relation to your existing internationalization strategy?
Was it perceived as a necessity for DTU to start making MOOCs/ were you nervous for the consequences of not doing it?
Did it mean anything to you to become the first Danish university to launch MOOCs? Was it a strategic consideration or a coincidence?
What expectations did the management have before launching the first MOOC?
Are there any expectations from the management in terms of getting a profit or return in any form?
Was it a specific goal to attract more students to come to DTU? If so, how do you imagine the process from a student taking a MOOC to coming to DTU to take a full degree?
Have you measured if you have attracted more students since the MOOC launch? If so, how have you done this?
What do you expect that the MOOC takers can give DTU? (reputation, pr, international environment, more fee paying students etc.)
What have DTU gotten out of it so far? Has it lived up to the expectations?
What have the challenges been from when you decided to offer MOOCs till the actual launch of your Coursera MOOCs? And what are the challenges right now?
Have you met any limitations when it comes to the use of MOOCs?
Is it your impression that there are a lot of prestige connected to being a MOOC offering university in terms of networking with other universities and how they perceive DTU?
Appendix D: Interview Guide for Peter Gundersen, University College Zealand

Background
Peter Gundersen is the project manager of “learning without borders”, a European Commission funded a project initiated by UCZ, which includes 5 MOOC projects in a region of the island Zealand in Denmark. The interview was made via Google Hangout in October 2014.

Interview Guide
Can you tell me more about this MOOC project you call “learning without boarders”? 
How far are you with the project? What’s the time perspective of the project?
What are the goals of the project?
Are you going to be measuring the results, in according to the goals, in any way?
How did you come up with the idea of using MOOCs for this project?
What makes MOOCs a good method and tool for the project?
Are MOOCs one of the “means to an end” or the end goal?
How do you believe MOOCs can”strengthen the region”?
Have you considered any political or strategic goals, that MOOC can help to achieve?
Did you have a role in the application for EU funding? And if so, do you know how any criteria you must live up to or any “terms and conditions” from the EU, related to the funding?
What are the expectations to this project?
What potential do you generally see in MOOCs?
Do you see any limitations?
Appendix E: Interview Guide for Lone Tønnesen

Background
Lone Guldbrandt Tønnesen, has a blog (MOOCs.dk) on MOOCs since 2011, where she has been observing and commenting on the MOOC phenomenon since 2011. Further she has been used as a source in news articles on MOOCs and as a speaker on MOOC conferences. The interview was made at Aarhus University in November 2014.

Interview Guide

Branding/strategic potential in MOOCs

How do you overall think universities can use MOOCs to brand themselves?

Are MOOCs a necessity for the universities? Do you think it could be harmful to not ride the MOOC wave?

Why do you think universities should offer MOOCs, and under which circumstances do you think universities

What do you think the MOOC takers can give back to the university?

Can the universities expect anything from them?

Is it your experience that the universities have an expectation to get something in return from the MOOC takers?

Internationalization/attracting students

How do you believe MOOCs can be used in the internationalization of universities?

You have been quoted in the newspaper ”Information” saying ”…imagine if just one per mille of the MOOC takers ends up coming here”. What are your thoughts on the process, from the student taking a MOOC to ending up at a Danish university? And what role do you see MOOCs play in this?

Political observations

What political goals do you believe MOOC can be used to obtain?

Have you observed any alternative ways to use MOOCs, in relation to strategic or political aims and goals?

Have you observed any resistance or ignorance from a political point of view?
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Have do you see the politicians’ role in this, and should they according to you act in the best possible way? (Are there laws that need to be changed? etc.)

Professional development in MOOCs

What are the universities role in the market of professional development and re-education?

Are they facing competition from private companies? How do you think the universities should act in order to not lose ground on this field?

Does it make sense to you to talk Danish relations in MOOCs, or shouldn’t we see it as a total global phenomenon?

What are some of the other current discussions in the MOOCsphere?

Time space place in MOOCs

How do you think MOOCs have changed the perception of time, space and place in learning?

What role do MOOCs play when it comes to the theory of ”the global village”?

Other observations

Are there limits to MOOCs and its potential?

Have you seen any cases of MOOCs, where it has been concluded that it did not serve the purpose it was meant to?

Can you imagine situations where MOOCs would not be the solution?

What do you believe Denmark as a whole can benefit from MOOCs, considered that education is provided free of charge already? How much can it revolutionize in Denmark?