

Developing A Strategy To Encourage The Animation Industry Life Cycle Evolution In Saudi Arabia

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Abstract

This thesis examines the Saudi animation industry and investigates the barriers that are preventing the development of its life cycle. Although there has been a demand for animation content since the establishment of the Saudi TV in 1965, the Saudi animation industry remains in its Introduction stage. Therefore, the study undertakes an analysis of the factors that could enable the industry to move to its Growth stage. To achieve this, the study attempts to establish an understanding of how different countries succeeded in developing their animation industry life cycle. Therefore, the study selects three countries as a qualitative multiple case study. These countries are the UK, which represents a Mature animation industry; Egypt, which represents an established Growth industry; while the United Arab of Emirates represents an emerging Growth industry. This has involved an in-depth analysis of the animation industries in Saudi Arabia and two other Arabian countries – UAE and Egypt – as well as of the UK. There has been very limited historiography for Arabian animation and almost none on the Saudi Arabian industry previously.

A consideration of which factors should be investigated, as the most effective in influencing the evolution of the industry, was undertaken. Reviewing the available literature on the animation industry development showed that four factors have been found to play a considerable role in developing the local animation industry: Higher

Education institutions, Networks, Government and Location. Thus, this study focuses on examining these four factors at different life cycle stages of the animation industry. The findings of this study demonstrate that their impact differs from stage to stage in developing the local animation industry; the significance of particular barriers also varies at different stages of the life cycle. Thus, this study developed a Theoretical Model that combines the most effective strategy that has been found within the studied countries. It also applied the model to the specific context of the Saudi Arabian industry and developed recommendations for a strategy to encourage its evolution. The model could also be applied to other developing animation industries.

Publications

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1 Introduction

The aim of this chapter is to introduce this thesis. It begins by presenting the research background and thesis problem, before determining the questions that this study will attempt to answer. This is followed by the study aims and the objectives that are required to accomplish these aims. A holistic picture of the methodology utilised in this research is presented, and an outline of the overall thesis structure is provided to give a clear guide for the reader.

1.1 Research Background and Problem

In Saudi Arabia, although there has been a demand for television animation content since the establishment of Saudi television in 1965 (Boyd & Najai, 1984), the animation industry is still reliant on imported and outsourced animation (personal interview, 2012). The demand for animation content has increased since the early 2000s when the Saudi Arabian General Investment Authority encouraged investment in media ventures. Consequently, a variety of private television channels were established to broadcast to Saudi audiences (Guaaybess, 2013). Some of these private satellite channels rely on animation, including channels that target children, where animated series are their main content (Yoon & Malecki, 2010). However, these channels are dependent on imported and outsourced animation, some of which is not appropriate for the Saudi audience because it may have a negative effect on Saudi culture. The issue of dependence on imported animation has previously been tackled from a cultural perspective; a number of studies have been conducted on this topic

including Aljohani (2000); Algaydi (2002); Abadislami (2006); Alotaybi (2006); Alharbi & Baines (2012) and Erqsous (2014). However, despite the awareness that has arisen from these studies, which have showed the impact of imported foreign animation content on Saudi culture, there is thus far an absence of studies that focus on the Saudi animation industry itself and that ask why there is still a reliance on imported animation in Saudi Arabia. At the time of writing this thesis, there is a scarcity of academic literature covering the animation industry in both Saudi Arabia and the wider field of Arab countries in general, though some relevant studies such as Bendazzi (1994), Ghazala (2011); Alrimawi (2014); and Bendazzi (2016) have touched on the subject. Most of the currently available literature, which generally covers Arab countries' animation industries from a historical perspective, has been published since this research project started, with the exception of Bendazzi (1994), who originally covered animation history from three Arabian countries including Egypt, Tunisia, and Algeria. However, much has been written about the animation industries in North America, Europe, and Asian countries. A non-exhaustive list of such studies includes Bendazzi (1994); Lent (2001); Wells (2002); Tschang & Goldstein (2004); Manion (2005); Eliashberg et al (2006); Fung (2007); Cole (2008); Kitson (2008); Lee (2010); Wesson (2010); Yoon & Malecki (2010); and Bendazzi (2016).

In the last two decades, research on the development of the creative industries has accelerated as different countries have begun to develop their creative industry sectors to benefit from these economically (Potts, 2009), and the animation industry is considered to be a significant contributor to the creative economy (Lee, 2010). In recent years, global demand for animation content has increased significantly; the global consumption of animation was US\$62.3 billion in 2006 whilst in 2010 it

reached US\$83.7 billion (Ernst & Young, 2014). This demand raised the awareness of many countries about the importance of developing their domestic animation industries, and thus, to cover this demand and benefit from animation as an economic source, countries with strongly developed animation industries such as Canada and France put more efforts into sustaining their domestic industries (Wesson, 2010; Kenny et al, 2011; Westcott, 2011), while countries with established but less developed industries such as Korea and China succeeded in developing and upgrading their domestic industries (Tschang & Goldstein, 2004; Fung, 2007; Yoon, 2010).

Accordingly, research into animation industry development has also increased. Most of these studies, however, concentrate on North American and European countries, or Asian countries that already have a strongly developed animation industry, such as Canada, the USA, Japan, and the UK (Bryman, 1997; Tschang & Goldstein, 2004; Wesson, 2010; Westcott, 2011; Cole, 2014), with some choosing to investigate Asian countries that previously acted as outsourcing hubs, such as Korea and China (Tschang & Goldstein, 2004; Wu, 2010; Yoon, 2010). There is also a growing body of literature that recognises the importance of developing domestic animation industries in those Asian countries that started developing as outsource hubs more recently, such as the Philippines, India, Malaysia, and Bangladesh (Thomas & Rayadurgam, 2005; Muthalib, 2007; Islam et al, 2013). However, there is a huge gap in terms of studies examining the development of the animation industry in Arab countries; to the best of this author's knowledge, only one study, by Alrimawi (2014), has so far highlighted the issues challenging the development of the Arab animation industry in general, and this does so without deep investigation of these issues, as his study is mainly focused on the issue of representation in Arab cinema. In addition, to date, there has been no research at all on the issue of animation industry development in Saudi Arabia in

particular. Therefore, this thesis seeks to fill this gap by studying the Saudi animation industry from an industrial development perspective. It seeks to identify barriers faced by the Saudi animation industry and to address the challenges that prevent its development, thereby contributing to the sadly-limited body of literature on the Arab animation industry. In addition, this study will document the rise of the Saudi animation industry, allowing it to be used as a foundation for further study of that industry in particular, as well as contributing to research on the animation industry in the Arab world in general. Finally, it will add to the growing body of literature that is concerned with animation industry development globally.

Existing research on animation industry development recognizes the critical role played by the many different factors that affect the industry development, which include higher education institutions, networks, governments, and location. However, most researchers have not examined these factors in detail, and no attempt has been made to identify the crucial aspects among these factors. Hence, this study brings these significant factors together to form a research framework to investigate their impact. This thesis proposes that the developing animation industry is a complex issue that is affected by all of these factors; however, this study also argues that it is more efficient to determine which factors are most significant in the case of Saudi Arabia, and thus, it attempts to identify how each of these factors contributes to the development of the animation industry by examining animation industry development using a holistic perspective. This is achieved by using industry development theory as a lens to direct this research overall (Clark & Creswell, 2008). The issue of industry development has attracted the attention of many renowned economists and decision makers such as Porter (1980); Grant (1991); and Klepper (1997). Understanding industry life cycle evolution is a fundamental principle for examining industry

development, as industry is like any phenomenon that has a life cycle: it begins, then develops, and eventually decays. Four stages have been identified within the industry life cycle: Introduction, Growth, Maturation, and Decline (Porter, 1980). This study borrows the concept of the industry life cycle and adopts a multiple case study paradigm by selecting three countries representing different industry life cycle stages. The UK represents the Mature industry, while Egypt represents an established Growth industry and the Emirates represents an emerging Growth industry. The rationale behind selecting three countries is to understand how each country has achieved its position and to investigate how the research framework has contributed to the development of that industry in order to determine what the most effective factor within the research framework are for each stage of development. This should allow the development of a Theoretical Model for the development of the animation industry life cycle.

1.2 Motivation

Several different rationales motivate this research. The first is the importance of the animation industry as a cultural device (Wells, 2002): animation is considered to be a medium that can convey the cultural identity of a nation (Cohen, 1997), and thus it is worthwhile for Saudi to protect its culture for future generations and to convey its cultural identity to other nations through that medium. Although this cultural aspect is an important motivation for this study, the author has chosen not to focus on studying Saudi animation from a cultural perspective because this issue has already been addressed by scholars. Thus, the author seeks to contribute more directly to the development of the Saudi animation industry, in the hope that the outcomes of this

research will enhance the growth of domestic Saudi animation, which can then be utilized to represent and convey the Saudi cultural identity accurately.

Another motivation for undertaking this research is that this study will support the achievement of the economic diversity plan that Saudi development policy has shifted toward. Until recently, the Saudi Arabian economy has been mainly based on oil, as this country has the largest global reserves of petroleum (Al-Darwish, 2015). However, since 2000, Saudi Arabian economic development policy has changed, and the country now aims to achieve greater economic diversity. This involves decreasing its dependency on petroleum by increasing government revenue from non-petroleum industries. Thus, Saudi Arabia in the last ten years has shifted toward a knowledge-based economy through the establishment of several projects that include developing human resources through scholarship programs sponsoring Saudi students to study abroad at advanced international universities; establishing a number of local universities in different regions of Saudi Arabia; and planning the establishment of economic knowledge cities in different regions in Saudi Arabia (Khorsheed, 2015). Based on this developmental turn, it is worth considering investment in the animation industry as another source of economic growth.

This research is also driven by personal motivations, with two different focuses. The first of these is that this research is funded by the Education Ministry of Saudi Arabia. It is therefore essential that the research should contribute to the development of Saudi Arabia. The second personal motivation is that the author has personal experience of the animation industry within Saudi Arabia, having worked as an illustrator for a children's magazine that was published by OK Toons, the first Saudi

media production company to produce animation. At that time, the researcher was interested in joining the animation team: however, the media firm outsourced all animation production processes to an animation studio in Turkey due to the availability of workforce, as there was no higher education institution in Saudi offering an animation course at that time. This experience raised the question of why Saudi did not already have a strong animation industry and hence this research seeks to discover the barriers constraining development of the Saudi animation industry and offers suggestions for ways to overcome these.

1.3 Research Questions, Aims and Objectives

This study attempts to answer the following questions:

1. Why is the Saudi animation industry still in the Introduction stage in spite of the continued demand for animation in the country?
2. What are the most significant factors in the development of the animation industry life cycle?
3. What are the strategies that countries with animation industries in Growth and Mature phases have adopted for each factor to evolve the development of their indigenous animation industries?

The aims of this research:

1. To investigate the Saudi animation industry in order to explore the barriers that constrain the development of the Saudi animation industry life cycle.
2. To determine the significant factors that influence the development of each stage of the industry life cycle.

3. To develop a Theoretical Model for the development of the animation industry life cycle.
4. To develop recommendations for the development of the Saudi animation industry.

To accomplish these aims, the research adopts these objectives:

1. To review related theories, including strategy theory, industry development theory and industrial cluster theory.
2. To review the literature on animation industry development in order to identify the most significant factors that influence animation industry development.
3. To develop a research framework that allows a focus on investigating relevant factors within multiple case study countries.
4. To investigate the current state of the animation industry in Saudi Arabia using primary and secondary research.
5. To investigate the animation industry in multiple case study countries using primary and secondary research.
6. To analyse and discuss the findings from investigation of the research framework factors within the multiple case study and identify how the factors of the research framework affect the evolution of the animation industry life cycle.
7. To design a Theoretical Model for the development of animation industry life cycle.
8. To apply the Theoretical Model to the Saudi Arabian case study and thus develop recommendations for the development of its animation industry.

9. To evaluate the Theoretical Model and the recommendations for the Saudi animation industry.

1.4 Research Methodology

This research investigates an issue that has not been previously studied, namely identifying the barriers that remain within the Saudi animation industry, which is in its Introduction stage, and thereby analysing how the animation industry life cycle could be encouraged to evolve. As this study seeks to develop in-depth knowledge of this issue, it adopts a qualitative case study approach; this is because such an approach offers a comprehensive understanding of matters that are little known, making it more appropriate for this study of a previously uninvestigated topic (Strauss and Corbin, 1990). As this study aims to design a Theoretical Model for developing the animation industry life cycle in order to apply this to the Saudi Arabian industry, it will therefore be helpful to investigate how different countries have achieved the Growth and Mature stages within their animation industries. This study therefore adopts a multiple case study approach to take a holistic look at the animation industry. Three different case studies, the UK, Egypt, and the United Arab Emirates, have been chosen. Yin (2013) argues that the selection of case studies in multiple case study research must be theory driven. The rationale for selecting these particular countries to be studied is based on the theory of industry development. This theory defines four different life cycle stages for industry: Introduction, Growth, Mature, and Decline (see section 2.1.2.1). In this study, each country chosen represents a different stage of the industry life cycle (Figure 1). The UK offers a Mature industry, while Egypt has an Established Growth industry and the Emirates has an Emerging Growth industry.

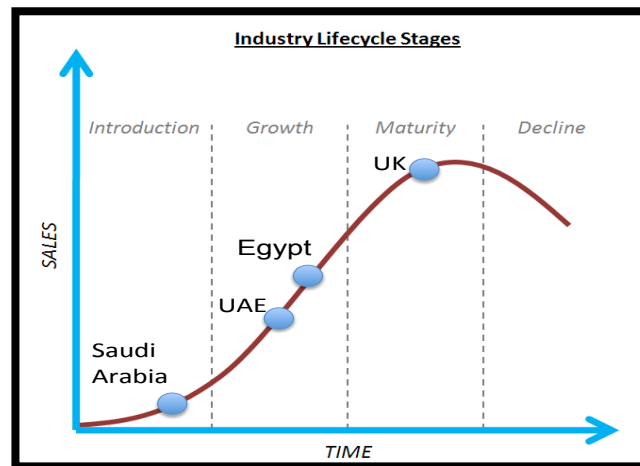


Figure 1: Location of case studies on the industry life cycle track (adapted from Porter, 1980)

The UK industry was chosen because UK animation distinguishes itself from other Mature animation industries by its creativity and diversity of style. For example, the Japanese animation industry usually follows an Anime style with 2D CGI technique, while the USA usually follows a realistic style with 2D and 3D technique, but UK animation is very diverse in the style and technique. The rationale for selecting Egypt is that Egypt has some similar features to Saudi Arabia, and both are Arabian countries. However, Egypt has succeeded in developing its animation industry as an established Growth industry, while the Saudi industry remains in its Introduction stage. In addition, Egypt was the first country among Arab and African countries to develop an animation industry, and it later succeeded in establishing itself as a regional outsourcing hub for animation production (Kaigwa, 2011). In terms of the rationale for selecting the Emirates' animation industry, this country also has a similar context to Saudi Arabia in that both countries are members of the GCC, share the same heritage, culture, and languages, and have similar economic states. However, the Emirates has succeeded in moving its moving image industry, including films,

animations, and game development, from the Introduction to Growth stages in a comparatively short period. Moreover, it has become the destination for both talent and stakeholders in these industries, attracting attention not only from the Middle East and North African regions but also globally (United Nations, 2008).

This study utilises a research framework to represent the conceptual foundations of the study and to limit the scope that this study will focus on; this is designed to enable the author to conduct an intensive investigation (Clark & Creswell, 2008). This is required in order to determine what the significant factors are for industry development. The formation of such a research framework involves studying existing literature, and examining related theories and concepts to use these as a lens to guide the research.

The research framework has been formed based on four factors that have been found to play a significant role in developing industries (see section 2.3). These factors are Higher Education Institutions, Networks, Government, and Location. Therefore, both secondary and primary research focuses on investigating these factors in Saudi Arabia and the multiple case study countries in order to capture a holistic picture of the state of the animation industry and how its industry life cycle begins and evolves. In addition, it seeks to identify how these research framework factors could be employed to encourage the development of the Saudi animation life cycle by making a comparison between the ways in which these factors have been utilized in the multiple case study countries.

As this study seeks to establish in-depth knowledge of its topic, it utilises a range of qualitative data collection methods including semi-structured interviews, study visits

and document analysis. This type of data collection seeks to answer the what, why and how questions, which are more appropriate for this study (see section 1.3) because it emphasises the interpreted meaning, experiences and views of participants (Pope & Mays, 1995). This study utilizes purposive sampling that focuses on key individuals who possess knowledge of various aspects of the animation industry. These key individuals include animation studio founders, animation course leaders, animation students and government representatives. All samples were selected from locations where the animation industry is clustered in each case study country. Specifically, London, Bristol and Manchester were selected from the UK; Cairo from Egypt; and Dubai and Abu Dhabi from the Emirates. Study visits were conducted to animation departments in higher education institutions to conduct interviews with animation course leaders and students, as well as to collect data about the facilities used to deliver the animation courses. This study also involved the author attending an animation festival and media fair to conduct interviews with participants.

1.5 Thesis Structure

This thesis is comprised of seven chapters as illustrated in Figure 2. Chapter One provides an introduction to the research. It presents the research background and problem and outlines the research questions, aims and objectives before delineating the methodology that this research adopts.

Chapter Two covers the literature review and is comprised of two sections. The first section presents the theoretical context based on a review of related theories. It reviews the Industry Development Theory (see section 2.1.2) that this study utilises as a lens to direct the research (Clark & Creswell, 2008). It is fundamental to understand

the general industry life cycle as basis for developing a strategy for a given industry, because each stage in the industry life cycle requires a different strategy (Sabol et al, 2013). Reviewing this theory helps to link up information about the past, present and future development of complex interactions between different factors in order to develop the appropriate strategy for a given current industry stage (Sabol et al, 2013). As this study is concerned with identifying the barriers that constrain the development of the animation industry, and asking how to overcome these barriers, it is therefore important to understand and apply the different stages of the industry life cycle to this examination (see section 2.1.2.1). Further concepts from the industry development theory that this study uses for guidance are the industry evolution drivers (see section 2.1.2.3), which trace the significant issues that encourage the evolution of the industry life cycle. Moreover, since this study seeks to identify the barriers to the development of Saudi animation, it is vital to investigate the many different types of barriers that may affect industry life cycle development to see which apply in this case (see section 2.1.2.2).

Another theory that this study reviews is Strategy Theory (see section 2.1.1): this is examined in order to review the different definitions for the term 'strategy'. In particular, the study seeks to understand what is required to develop a strategy to help evolve the life cycle of the Saudi animation industry to achieve competitiveness in order to address this within the Theoretical Model. In addition, this study reviews Cluster theory, as this theory has been highly recommended by policy makers in terms of developing industries (Weber, 1929; Marshall, 1980; Porter, 1990; Baptisa and Swann, 1998). In particular, this theory addresses the issue of establishing epistemological clusters (Hakanson, 2005; Huggins, 2008; Evers, 2008; Evers et al, 2009; Evers et al, 2010). Reviewing the literature of cluster theory provides a useful

analysis of the dynamics of industrial development, as well as acting as a lens for the selection of samples from animation industry clusters for the multiple case study.

The second section of Chapter Two covers secondary research on the animation industry itself. It provides a critical review of existing animation research to identify the gap that this research seeks to fill, which then leads to the formation of the research framework that this study will focus on to identify the relevant factors.

Chapter Three describes the methodology that this study utilizes and gives a justification of why this has been selected. It considers the philosophy that underpins this study and identifies the rationale for the qualitative approach and case study research model. Moreover, it discusses the validity and reliability of this study, alongside identifying the data collection tools and the analysis methods used to secure the results.

Chapter Four provides an overview of an animation industry analysis for Saudi Arabia and the multiple case study countries (the Emirates, Egypt, and the UK). This chapter provides a holistic picture of the state of the animation industry in each of these countries. This industry analysis is comprised of the following subsections: industry structure, industry life cycle, clustering, value chain and value structure, market divisions, industry organisation, and the historical development of the industry. The rationale for this analysis is to capture a closeup of the animation industry in each country studied in order to understand the industry environment in that context. Understanding the overall industry is very important because it identifies the current position for the industry, and in this case, provides this study with an indication of whether these case study countries have adopted successful strategies

that could be transferable. This chapter contributes to the literature on animation industry development by examining the Saudi animation industry, which has not been discussed previously by scholars. In addition, it addresses the animation industry in another two Arab countries that have not been discussed from an industrial perspective before.

Chapter Five provides an analysis and discussion of the findings from the multiple case study countries using thematic analysis. The analysis covers all the data collected during the study, from both primary and secondary sources. Chapter Six is divided into three sections: developing the Theoretical Model, the application of this Theoretical Model to the Saudi animation industry and evaluation of the Theoretical Model.

Finally, Chapter Seven concludes this thesis by presenting the research implementation and outcomes, including the main findings. Moreover, it discusses the significance of this research and the limitations of the study, as well as providing recommendations for further study.

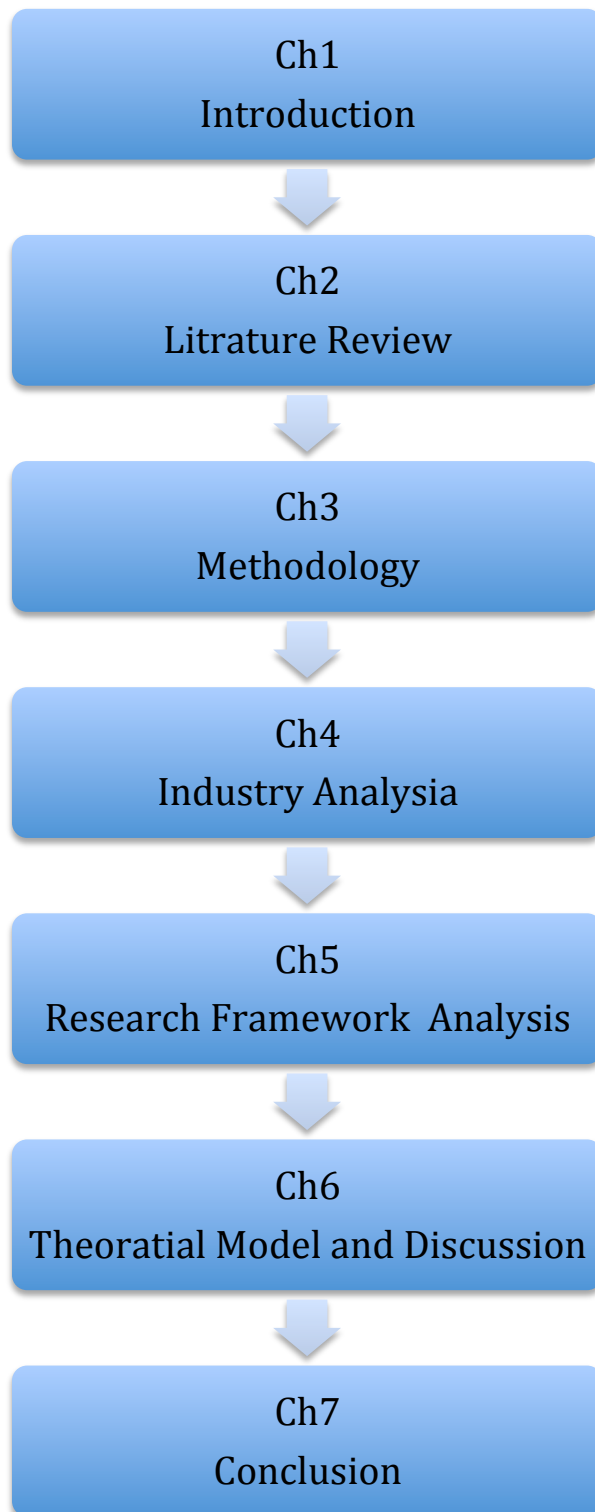


Figure 2: Thesis structure

1.6 Summary

This chapter introduced the thesis, providing a holistic picture of the state of current research. It introduced the research problem and author motivations, as well as addressing the study questions, aims, and objectives. It explained the methodology adopted by this study before summarising the thesis structure by providing a short summary of each chapter in this thesis. The next chapter features a literature review that will flesh out the theoretical context, provide details of research on the animation industry, and develop the research framework.

2 Literature Review

The previous chapter introduced and outlined the thesis of this research: the current chapter aims to review the existing relevant literature. This chapter therefore has three main sections. The first section concerns theoretical context, and covers several related theories that include industry development theory, industry strategy theory, and cluster theory. The second section reviews literature concerned with animation industry development. On reviewing this literature, the author identified four factors that the existing literature noted for their contribution to the development of the animation industry. These four factors are Higher Education Institutions, Networks, Governments, and Locations. These four factors are therefore utilised to form the research framework, that will be investigated in the multiple case study, and this is outlined in the third section.

2.1 Theoretical Context

This section is concerned with reviewing theories relating to this research. The theoretical context covers industry development theory, which is utilised as a lens to direct this research (Clark & Creswell, 2008). This focuses on the concept of industry life cycle to understand what the characteristics of its different stages are; what the drivers that encourage its development are; what barriers are faced by a given industry; and how these factors influence an industry's structure. The theoretical context also takes into account strategy theory in order to understand what strategy means and to identify the definition that this study adopts for its strategy concept. In particular, the study seeks to understand what is required to develop a strategy for evolving the life cycle of the Saudi animation industry to achieve competitiveness. In

addition, this section will review cluster theory, as this theory has been highly recommended by policy makers with regard to examining developing industries.

2.1.1 Industry Strategy Theory

As one of the study aims is to develop a theoretical model of effective strategies for developing the animation industry life cycle in Saudi Arabia, it is essential to consider strategy theory in terms of what this means and its origin. In the following subsections, the term strategy will be defined by presenting a number of strategy definitions from different scholars. As this study seeks to find out how the Saudi animation industry could better compete in the market, it is also important to shed light on the competitive strategy concept by introducing Porter's assumptions of how an industry achieves competitiveness.

2.1.1.1 *The Origin of Strategy Theory*

The term strategy stems from the Greek word *strategos*, which means chief magistrate or military commander-in-chief (Ghemawat, 1999). The concept of strategy has therefore been taken from the military and applied to business (Nickols, 2012). Broadly speaking, the concept of strategy was first introduced in the business field by Kenneth Andrews (Porter, 1980; Nickols, 2012). During his teaching at Harvard Business School in the early fifties, Andrews developed the concept of strategy as the organizing principle of his business policy course. According to Harvard Business School professor and strategy expert Joseph L. Bower, Andrews and the other professors who adopted his term made a great contribution to business development because they established the field of business policy at Harvard Business School, which in turn laid the foundation for the business strategy field (Reyes, 2011). In fact,

Andrews defined the difference between **corporate strategy**, which is concerned with the business of individual firms, and **business strategy**, which is concerned with the basis of competition for a particular business field (Nickols, 2012). Andrews (1987) defined corporate strategy as:

"the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and noneconomic contribution it intends to make to its shareholders, employees, customers, and communities (Andrews, 1987, pp.18-19).

In this study, the focus will be on the strategy for the animation industry in general although it aims to develop a strategy to improve the Saudi animation industry in particular. Nevertheless, it is essential to highlight different definitions for the term strategy in order to solidify which one applies to this research. This is because strategy has been defined varyingly by different scholars. According to Alfred D. Chandler (1962), strategy is *"the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources for carrying out these goals"*. Tregoe and Zimmerman (1980) defined strategy as *"the framework which guides those choices that determine the nature and direction of an organization"*. A further strategy definition by Bryson is that it is *"a pattern of purposes, policies, programs, actions, decisions, or resource allocations that define what an organization is, what it does, and why it does it"* (Bryson, 1996, as quoted in Nickolas, 2012, pp4-5).

Moreover, in 1987, Henry Mintzberg, who has become a well-known researcher in the strategy field, identified 5 Ps that the term strategy could be used for:

1. *"Strategy as a **plan** deals with how leaders try to establish direction".*
2. *"Strategy as a **ploy** is take us into the realm of direct competition where threats and feints and various other maneuvers are employed to gain advantage".*
3. *"Strategy as a **pattern** focusses on action, reminding us that the concept is an empty one if it does not take behavior into account. strategy as a pattern also introduce another important phenomenon in organization, of convergence, the achievement of consistency in behaviour. how does consistency form, where does it come from?".*
4. *"Strategy as a **position** encourages us to look at organization in context, specifically in their competitive environments".*
5. *"Strategy as a **perspective** raises intriguing questions about intention and behavior in a collective context". (Mintzberg, 1987, pp12-16)*

Nickolas supports Mintzberg by defining strategy in a simpler way:

"Strategy is all these — it is perspective, position, plan, and pattern. Strategy is the bridge between policy or high-order goals on the one hand and tactics or concrete actions on the other. Strategy and tactics together straddle the gap between ends and means. In short, strategy is a term that refers to a complex web of thoughts, ideas, insights, experiences, goals, expertise, memories, perceptions, and expectations that provides general guidance for specific actions in pursuit of particular ends. Strategy is at once the course we chart,

the journey we imagine and, at the same time, it is the course we steer, the trip we actually make. Even when we are embarking on a voyage of discovery, with no particular destination in mind, the voyage has a purpose, an outcome, and an end to be kept in view". (Nickolas, 2012, p 6).

The use of the term strategy that this study applies is based on the Mintzberg 5 Ps, as it includes perspective, position, plan, ploy and pattern. This is because this study attempts to take a perspective on Saudi animation, and to upgrade its position by adopting a tactical plan that follows a successful pattern. In other words, this study seeks to discover the current position of Saudi animation and compare it with selected case studies that have more developed industries than that of Saudi. Through highlighting the patterns of strategies adopted by these case studies that have assisted industry development, these may be identified and adopted by the Saudi animation industry to assist with market competitiveness. Therefore, it is important to understand how an industry achieves competitiveness, which will be discussed in the next section.

2.1.1.2 Achieving Competitiveness within an Industry

One of the aims of this study is to develop a theoretical model for effective strategies for allowing the animation industry life cycle to develop so that the Saudi animation industry can become a competitive industry; thus, discovering how such competitiveness can be achieved is a basic premise of this study as a whole. The issue of achieving competitiveness has been investigated by several studies (Porter, 1990). Michael Porter, who is considered the guru of competitive strategy, defined competitive strategy as "*a broad formula for how a business is going to compete,*

what its goals should be, and what policies will be needed to carry out those goals" (Porter, quoted in Nickols, 2012). He argued that competitive strategy is "*about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value*" and added "*The essence of strategy is choosing to perform activities differently than rivals do*" (Porter, 1980).

In his book *The Competitive Advantage of Nations* (1990), Porter noted that several studies have addressed industry development strategies and the issues of competitiveness. It is noticeable that these studies tended to address one question in particular: Why do some nations succeed in a particular industry while others fail? In other words, how do nations achieve competitiveness in a particular field? As examples, Italy dominates the ceramics industry; Germany leads in luxury cars; Japan is the major force in robotics; the USA leads in terms of computer software; and Switzerland is famous for its chocolate (Porter, 1990). The same question can be asked in terms of the animation industry: why have some countries achieved competitiveness in the animation industry? This study seeks to determine how the countries selected for the multiple case study achieved this goal. In particular, this involves examining how the UK became one of the leading competitive countries in the global animation industry (Kenny & Broughton, 2011); how Egypt succeeded in winning its dominant competitive position for outsourcing among Arab countries (Kaigwa, 2011); and how the Emirates succeeded in achieving a prominent position in the animation industry among the Gulf Countries so quickly (Al-Ghufli, 2010).

Porter (1990) argues that previous studies that addressed the success of nations in achieving competitiveness in a specific field come to conflicting conclusions; some of

these studies consider competitiveness to be a macroeconomic phenomenon that is affected by various economic factors such as demand rate and government deficits, while other studies believe that competitiveness is achieved as a result of the availability of low-cost labour. On the other hand, still other studies consider competitiveness to be due to the availability of natural resources, whereas some studies believe that government policy is the core of competitiveness.

Porter's argument was developed based on a four-year study that targeted ten different nations that had succeed in competing internationally: he discussed this study in his book *The Competitive Advantage of Nations* (1990). Porter's study sought to understand how and why an industry begins within a nation and how it grows. Porter found that the rationale of competitiveness is productivity: he stated, "*The only meaningful concept of competitiveness at the national level is productivity*" (Porter, 1990). Porter defined productivity as "*how the nation uses its resources, its labour, its capital and its national endowment*" (Porter, 2011). Similarly, according to The World Economic Forum's Global Competitiveness Report, "*competitiveness is the set of institutions, policies, and factors that determine the level of productivity of a country*" (Schwab, 2010, p4).

Thus Porter believed that achieving competitiveness relies on three different levels of productivity (Porter, 1990). Firstly, endowments, which are resources that the nation possesses, such as natural resources, location and climate. Resources play a significant role as a platform for driving productivity, but they are not sufficient in and of themselves to drive a high level of competitiveness. Macroeconomic productivity is the second driving factor, which works with certain framework

conditions to build a foundation that can assist and stimulate productivity by focusing on issues related to human development, education, and the role of law. However, macroeconomic productivity is also not sufficient for countries to reach a high level of competitiveness. The third level is microeconomic productivity, which is concerned with the business environments of firms, and focuses on offering conditions that enable firms to become productive, such as industrial clusters, because productivity does not occur within isolated firms. If a nation can create all three levels of productivity, it will achieve international competitiveness. In the current study, the author will attempt to shed light on several aspects related to these levels by conducting an industry analysis of the applicable countries (see Chapter Four).

2.1.2 Industry Development Theory

As mentioned above, Porter's study (1990) aimed to find out how a nation could achieve competitiveness. Porter sought to understand how and why a given industry began in a nation and how it grew. He attempted to understand the life cycles of the selected industries in his study, because understanding the industry life cycle is not only useful in terms of finding out how an industry succeeds in achieving its current position but also provide a useful tool for discovering how an industry could improve its performance (Sabol et al, 2013). Economists and decision makers generally believe that it is vital to understand an industry's life cycle before developing a strategy for that industry because each stage of the industry life cycle requires a different strategy (Sabol et al, 2013). As this study seeks to develop a strategy to improve the animation industry in Saudi Arabia, it is fundamental that it begins by understanding the industry life cycle for the Saudi animation industry as well as the animation industry life cycle within the multiple case study countries. This analysis of industry

life cycle will assist by linking information about the past, present, and future development of the industry together to help increase understanding of the complex interactions between different factors to facilitate the development of an appropriate strategy for the current industry stage (Sabol et al, 2013).

In the following section, the theory of industry life cycle will be introduced, and different industry life cycle phases will be presented by highlighting each stage's features. After that, several significant studies that cover different perspectives on life cycle theory will be highlighted.

2.1.2.1 Industry Life Cycle

The industry life cycle concept as presented by Michel Porter in 1980 (Sabol et al, 2013) was derived from the widely accepted concept of the product life cycle, which was introduced by Raymond Vernon in 1966 (Hill, 2003). The product life cycle, like any other life cycle phenomenon, passes through different stages from introduction to decline, and each stage has different features and characteristics. Porter (1980) applied this concept of the life cycle to whole industries, where he identified particular characteristics for different industry life cycle stages. In his work, the industry life cycle was represented by an S-curve (Figure 3). There are a number of similar models for life cycles, which differ in terms of the number and names of the stages identified (McGahan et al, 2004). For example, Fox (1973) identified five stages for a product life cycle: pre-commercialisation, introduction, growth, maturity, and decline, while Wasson (1974) identified a six-stage product life cycle: market development, rapid growth, competitive turbulence, saturation, maturity, and decline. Porter (1980), however, classified the industry life cycle into four stages:

introduction, growth, maturity and decline, and Hill & Jones (1998) identified five stages in the industry life cycle: fragmentation, growth, shake-out, maturity and decline.

McGahan (2004) has developed a broader model that includes four trajectories of industrial evolution: Progressive, Creative, Intermediating and Radical change. In this model, each trajectory has four different stages. The Progressive and Creative trajectories are represented by the same stages as the Porter Industry Life Cycle Model, which McGahan called the Classic Industry Life Cycle Model (Figure 3), while the Intermediating and Radical trajectories are represented by different curves on the chart, which she called the Alternate Model (Figure 4).

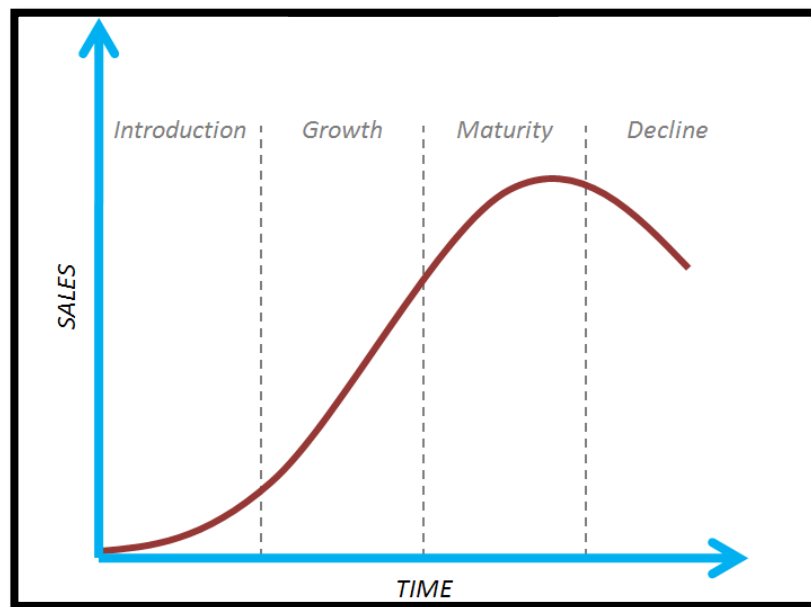


Figure 3: Industry life cycle (Porter, 1980)

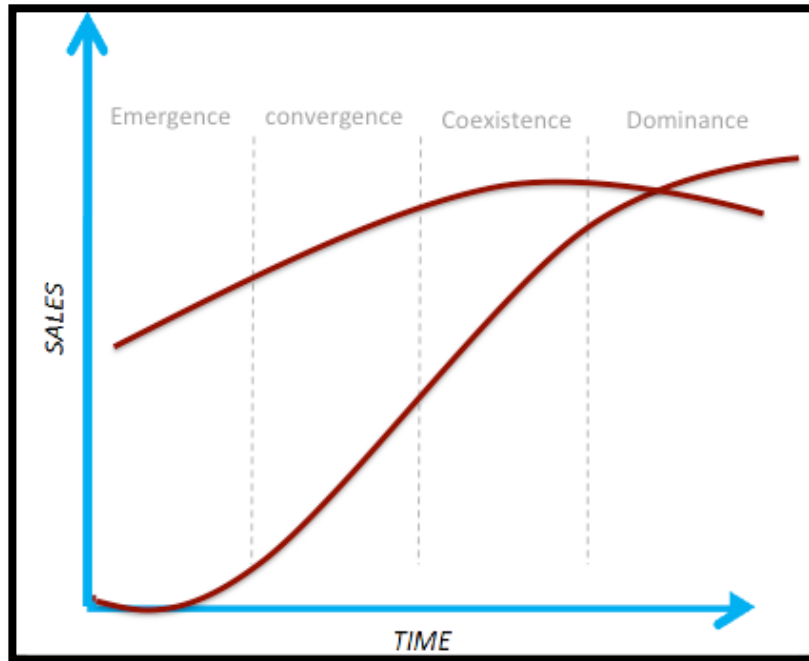


Figure 4: Alternate industry life cycle model (McGahan, 2004)

In terms of determining the trajectory of a given industry, McGahan states that it depends on whether the industry's core activity¹ and core assets² are threatened by obsolescence. McGahan developed a model that assists with understanding the threats faced by each trajectory (Figure 5). An industry will follow the Radical trajectory life cycle when both its core activity and core assets are threatened by obsolescence, while an industry where only the core activities are threatened by obsolescence follows the Intermediating trajectory. Similarly, an industry in which only the core assets are threatened by obsolescence follows the Creative trajectory, while an

¹ Core activity refers to those business functions that are critical, and closely related, to a firm's strategy as expressed in customer service, marketing, and product design (businessdictionary, 2017).

² Core assets are the assets owned by a company that are essential to its ability to generate profitable revenue. The profitable components of a business may include production facilities, distribution outlets, a wholly-owned subsidiary, or a division of the company (businessdictionary, 2017).

industry where neither core assets nor core activities are threatened by obsolescence follows the Progressive trajectory (McGahan, 2004).

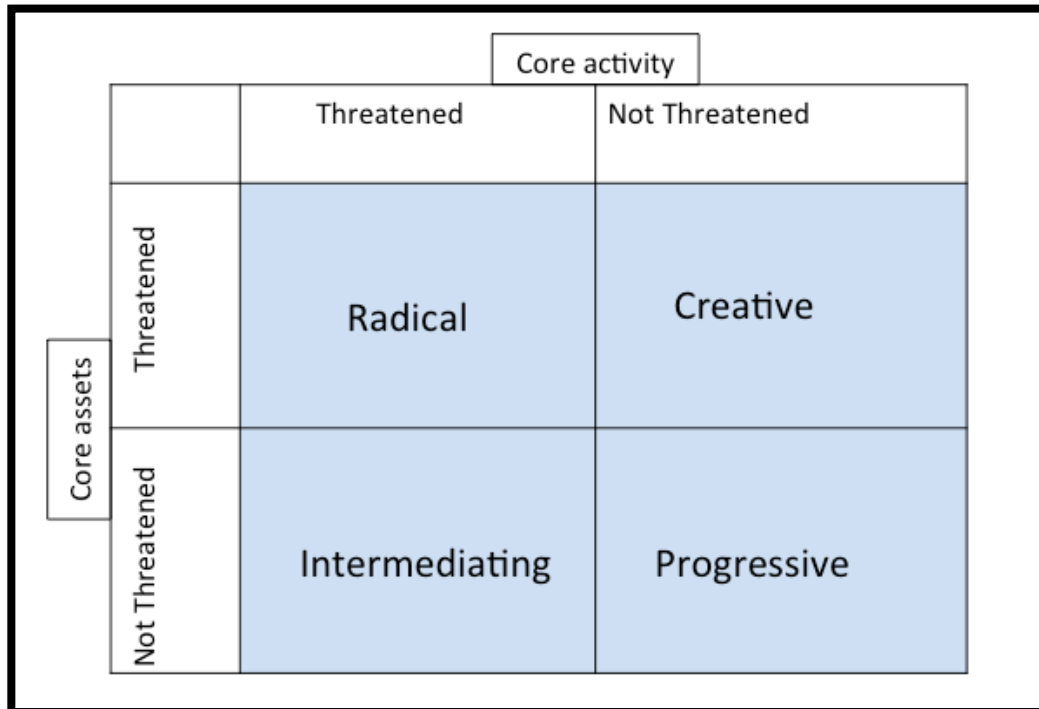


Figure 5: Trajectories of industry (McGahan, 2004)

According to McGahan’s classification, the animation industry should be classified as having a Creative trajectory. This is because the core activities of the animation industry are not threatened by obsolescence: that is, the relationship between customers and suppliers such as producers and television channels is not threatened by obsolescence. However, the core assets in the animation industry are threatened by obsolescence. For example, facilities that have been used to make animation in the past have been threatened by obsolescence due to the introduction of new technology. If the animation industry is considered to be taking a Creative trajectory, this means it should follow the S curve industry life cycle, based in her argument. Therefore, this

research will utilise an industry life cycle model that follows the S curve. In particular, this study will use the Porter industry life cycle model, because it is considered to be the cornerstone of life cycle analysis (Sabol et al, 2013) and has been studied and tested by a large number of researchers, making it a key framework in management literature. Thus, it is proven to assist in determining which strategy to apply in different competitive environments (Oster, 1994), and hence will be beneficial as a reference as this research seeks to develop a theoretical model of strategies for the animation industry.

As mentioned above, Porter (1980) classified the industry life cycle into four stages: Introduction, Growth, Maturity, and Decline.

Introduction: the first stage for the industry life cycle. At this stage, there is no competition because only a few firms have entered the industry, but there is a high level of uncertainty and high levels of risk, along with low profits (König & Stephan, 2007). **Growth:** the second stage that an industry passes through. Here, the number of competitors entering the industry increases and risk can be more easily covered as a result of the increase in profits that they generate (Porter, 1980).

Mature: in this stage, sales within the industry have reached their peak as a result of an increase in competitors. In the middle of the Mature stage, a shakeout often occurs, which affects the number of competitors so only the best firms survive. However, in some cases, by the end of the Mature stage, sales have already started to decline (Klepper 1997; Porter, 1980).

Decline: this is the end of the industry life cycle, as the number of competitors is reduced to reflect most firms exiting due to a decline in sales (Porter, 1980).

Economists believe that industries are different in terms of the amount of time that they remain in each life cycle stage; additionally, some industries shift directly from the Growth stage to the Decline stage without reaching the Mature stage (Porter, 1980; Grant, 2005). In this study, the selected case studies are currently passing through different life cycle stages. The UK animation industry is in its Mature stage, while the Egypt and Emirates animation industries are in their Growth phases. This study further defines Egypt as being in an *established* Growth stage industry, as it started its Growth stage a long time ago, while the Emirates, in this study, is considered to have an *emerging* Growth stage industry. However, although the Egyptian industry began its Growth stage before the Emirates industry even began, it still remains in this phase. On the other hand, the Saudi animation industry is still in its Introduction stage. These varieties allow the study to construct a comprehensive picture of how an animation industry starts up and moves from stage to stage. Moreover, each industry life cycle stage requires a different strategy that will work successfully with the stage's conditions (Klepper 1997; Luck & Ferrell, 1979; McGahan et al. 2004; Porter, 1980; Sabol et al, 2013). This study thus aims to identify the animation industry life cycle for the selected case studies in order to define what strategies have been implemented during different life cycle stages in order to extract the appropriate strategy for each stage for use in the Saudi animation industry. The industry life cycle for the Saudi animation industry and those for the multiple case study are examined in Chapter Four. Table 1 shows a summary of Porter's (1980) most common predictions, which this thesis will use as a guide in the analysis of industry life cycle for the animation industry in Saudi Arabia and for the multiple case study countries.

Life cycle stages key indicators	Introduction	Growth	Mature
Number of entries	Few	Moderate	Many
Quality of product	Poor	Good	Excellent
Risk	High	Can be covered	Low
Demand	Low	Moderate	High

Table 1: Key indicators for the different stages of the animation industry life cycle (Alharbi, 2012)

This study attempts to identify the appropriate strategy for each industry life cycle stage as it seeks to develop a strategy to encourage the development of the animation industry in Saudi Arabia. Therefore, it is important to understand what the various industry barriers that challenge the industry's evolution might be before developing such a strategy.

2.1.2.2 Industry Barriers and their Effects on the Industry and Market Structure

As this study is concerned with identifying the obstacles that challenge the Saudi animation industry's life cycle development, it is important to review the literature on industry barriers. Broadly speaking, there are several different industry barriers that create obstacles for the development of the industry life cycle. Economists have identified three categories for these barriers: entry barriers, mobility barriers, and exit barriers (Caves & Porter, 1977; Porter, 1980; Grant, 2005). In the following section, each of these types of barriers will be discussed separately.

2.1.2.2.1 Entry Barriers

Entry barriers refer to any challenges that prevent entry to a particular market or industry. These barriers protect existing firms by restricting the competition in a market. This concept was first identified by Joe Bain (Caves & Porter, 1977), who defined an entry barrier as *"an advantage of established sellers in an industry over potential entrant sellers, which is reflected in the extent to which established sellers can persistently raise their prices above competitive levels without attracting new firms to enter the industry"* (Bain, 1956 p3). Another definition was given by George Stigler (1968), who stated that entry barriers are *"A cost of producing that must be borne by a firm which seeks to enter an industry but is not borne by firms already in the industry"* (Stigler, 1968 p. 67). Further definitions for entry barriers were given by Franklin M. Fisher (1979): *"anything that prevents entry when entry is socially beneficial"* (Franklin M. Fisher, 1979 p23), and Dennis Carlton and Jeffrey Perloff (1994), who defined entry barriers as *"anything that prevents an entrepreneur from instantaneously creating a new firm in a market"* (Carlton and Perloff, 1994 p110). Understanding entry barriers can help to create an understanding of why so few firms have entered the Saudi animation market, paving the way for creating a supportive guide to overcoming these entry barriers as part of developing a Theoretical Model of effective strategy for the animation industry life cycle.

According to Porter (1980), there are several common barriers to entry that include economies of scale; product differentiation; capital requirements; switching costs; access to distribution channels; cost advantages; and government policy (Porter, 1980). Obviously, consideration of entry barriers will assist the development of an understanding of the industry structure of the Saudi animation industry and the

multiple case studies. Such industry structure is influenced by the number of firms that compete in a given industry, and thus, if there are high entry barriers and only a few firms manage to enter the market, the industry is considered to be concentrated, and each firm is likely to have a large market share. According to Shughart and William (2008), "*Industrial concentration refers to a structural characteristic of the business sector. It is the degree to which production in an industry--or in the economy as a whole--is dominated by a few large firms*" (Shughart II, 2008). When there are low entry barriers, the industry structure is fragmented, as many firms compete in a given industry (Porter, 1980).

Entry barriers are just one of the forces that determine market structure. Economists have classified market structure into four categories: Perfect Competition, Monopolistic Competition, Oligopoly, and Monopoly. These structures are based on three criteria: number of sellers, product characteristics, and barriers to entry (Perreault & McCarthy 2005). The market structure classifications according to these three criteria are summarized in Table 2, below:

	Market Structure			
Criteria	Perfect Competition	Monopolistic Competition	Oligopoly	Monopoly
Number of Firms	Many	Many	Small	One
Product Characteristics	Homogenous	Differentiated	Homogeneous (Pure Oligopoly) or Differentiated	Unique

			(Impure Oligopoly)	
Barriers to Entry	None	None	High	Very high

Table 2: Market Structure (Perreault & McCarthy, 2005)

2.1.2.2.2 Mobility Barriers

Mobility barriers refer to the obstacles that challenge a given industry in terms of moving from a lower stage to a more developed one in the industry life cycle. These mobility barriers are the reason that industries differ in terms of their current stage of life cycle and in the period that they remain in each life cycle stage. For instance, some industries generally remain in a particular stage for a long time, while other industries tend to move faster from stage to stage; in some cases, an industry may move directly from the Growth stage to the Decline stage without approaching the Mature stage (Porter, 1980; Grant, 2005). According to Porter (1980), the common mobility barriers are "*proprietary technology; access to distribution channels; access to raw materials and other inputs (skilled labor) of appropriate cost and quality; cost advantages due to experience, made more significant by the technological and competitive uncertainties; risk, which raises the effective opportunity cost of capital and thereby effective capital barriers*" (Porter, 1980, p220). Identifying mobility barriers will assist with understanding why the UK animation industry has reached its Maturity, while the Egypt animation remains in its Growth phase in spite of the fact that both industries started at approximately the same time - the UK's first short animation was in 1925 (see section 4.4.7) and the Egyptian one was in 1935 (see

section 4.3.7). Furthermore, understanding mobility barriers is essential in terms of understanding how the Emirates animation industry, which started after the Saudi industry, has achieved its Growth stage in such a short time. The issues raised by mobility barriers in the multiple case study countries will be discussed in more detail in Chapter Four.

2.1.2.2.3 Exit Barriers

Exit barriers refer to the hindrances that firms face as they prepare to leave a given industry if they are not getting profit from it (Porter, 1980). There are several common exit barriers, including investment in specialist equipment; specialized skills, and fixed costs. These exit barriers force firms to remain in industries that have reached the Decline stage, because the cost of leaving is greater than the firms can absorb in order to enter a different industry.

2.1.2.3 Industry Evolution Drivers

To identify the current life cycle for a given industry, it is essential to understand the forces that boost industry evolution. Grant (2005) clarified that there are two basic drivers that play a fundamental role in industry evolution. These drivers are demand growth and knowledge production and diffusion.

2.1.2.3.1 Demand Growth

In industry evolution, demand growth follows an S-shaped growth curve, where the curve increases, gradually reaching a peak then undergoes a gradual decline

underpinning the curve line (Figure 3). In other words, demand growth, which is represented by the number of sales in a given industry, will start from its lowest amount in the Introduction stage, when the industry is just beginning, as there are few firms competing in the market and only a few customers have been introduced to the industry, or because of the poor quality of the product due to a lack of experience (Grant, 2005). In the animation industry, the demand in the Introduction stage is very low, and is often limited to local buyers due to the poor quality of industry offerings. This description applies to the Saudi animation industry; as the industry is still in its Introduction stage, only a few firms have managed to enter it. There is a general lack of experience and knowledge, which results in the production of poor quality animation compared with those from industries in their Growth and Mature phases. Consequently, the demand for such production is low, and mostly centres on local buyers (see Chapter Four).

An industry will move to the Growth stage when the demand growth increases, and this is usually due to an increase in the number of customers that buy products from this industry. As more firms enter the industry, the competition increases as each firm improves its product to attract customers (Grant, 2005). This characteristic is reflected in the animation industry in Egypt and the Emirates, where production quality has improved. Accordingly, their work has attracted more buyers. They even have regional buyers, as both countries provide an outsourcing service for animation for other Arab countries. Thus, demand for their product has increased and more firms have entered the industry to cover this demand (see Chapter Four).

When the demand growth reaches a peak, the industry enters its Mature stage. In the animation industry, demand growth generally increases to a higher level as a result of excellence in quality. In the UK, the animation industry has attracted a wide range of buyers: it has succeeded in attracting local buyers, as most of the animation content shown on the local television channels is of local production, but in addition, it has succeeded in attracting regional and international buyers, and UK animation production is exported to many countries globally (Kenny & Broughton, 2011). This high demand has resulted in an increase in the volume of UK animation sales (see Chapter Four).

Finally, if an industry fails to increase its market demand, it will move into the Decline stage. This occurs if the number of customers decreases because are now interested in an improved product or they have found new substitutes (Grant, 2005). As discussed above, increasing growth in demand is very important for industry evolution, so it is important to consider how to increase demand growth for the Saudi animation industry in order to boost its life cycle. To accomplish this, this study will investigate the life cycle of the animation industry in Saudi Arabia to identify what aspects currently result in low demand for its production. In addition, this study will investigate how the multiple case study countries increased the demand for their products and what factors supported this increase.

2.1.2.3.2 Knowledge Production and Diffusion

In terms of the second driver that boosts industry life cycle evolution, which is knowledge production and diffusion, it is important to spotlight the meaning of the term knowledge and to investigate the knowledge creation process before discussing

how it can boost the industry life cycle. The term knowledge refers to “*facts, information, and skills acquired by a person through experience or education. The theoretical or practical understanding of a subject*” (Oxford English Dictionary, 2014). According to Grant (2005), an industry is born and starts its Introduction phase as a result of new knowledge creation, which is seen in the invention of new products and the availability of the basic skills required to produce such a product. In the animation industry, this can be seen when as a period of very basic skills and limited techniques such as 2D CGI and simple styles of animation with fewer character details. These basic skills and limited techniques appear are due to the limited knowledge available about animation. This clearly applies to current Saudi animation production, and in particular the work from several Saudi studios such as Masameir and Bakheeta, which both utilise very simple characters that do not require a high level of skills to create. In addition, they both use 2D techniques using Adobe Flash, which is a less complex technique compared to the 3D animation that requires higher skills and complex software such as Maya. However, Saudi animation productions that are outsourced to studios in countries with Growth stage animation industries are more advanced in terms of the techniques utilised, such as 3D. More information about these two animation studios and other Saudi animation productions studios will be covered in Chapter Four, within the Historical Development section (see section 4.1.7).

Grant (2005) pointed out that an industry will move to its Growth phase when more knowledge is generated in the form of gradual inventions that improve the design and technical standard of products as market entrants seek to increase the quality and diminish the cost of their products. The knowledge diffusion of this improvement in

design and technical standards will assist other firms, who will start applying this improvement to their products. Alongside this, knowledge diffusion facilitates new firms entering the market. Knowledge diffusion is also important for the customer because it increases recognition of the product's value (Grant, 2005). This type of knowledge diffusion boosts the industry cycle because it increases firms' competitiveness as they seek to satisfy these knowledgeable customers. Therefore, the more knowledge generated and diffused, the more additional quality and innovation are added to the product. Accordingly, more customers will want the product and more firms will enter the market to offer this product (Grant, 2005). In the animation industry, this type of improvement is reflected in new techniques and the skills to apply them appropriately, such as using more advanced techniques including 3D CGI or motion capture to portray realistic movement for characters. Besides this, in Growth stage animation industries, style can be seen to have improved, with assorted styles and more details on offer. This can be seen in the improvements that occurred within both the Emirates and Egyptian animation industries, and both of these now compete as providers for outsourcing services in the Arab World. More information regarding how Egyptian and Emirates animation has improved is presented in Chapter Four, within the Historical Development sections.

Knowledge creation and diffusion generally result in improvements to the product. In addition, knowledge diffusion facilitates more firms entering the market. This results in a shift within the industry to its Mature stage, once it has improved its product and many firms are competing and offering variety in terms of the industry product. In the Mature stage, animation firms apply a variety of techniques that require very advanced skills and utilise a variety of styles that reflect the advanced knowledge that

they have. In addition, there are many firms, which demonstrates how much this knowledge is diffused. In the UK, which has a Mature animation industry, the availability of advanced knowledge has affected the techniques and skills that apply to its animation production and resulted in great improvements. For example, UK animation that uses stop motion techniques such as the work of Aardman Animation, requires advanced skills that are not available in Egypt and the Emirates, which are only in the Growth stage of their animation industries.

Thus, it is essential to understand how to encourage knowledge creation and diffusion in the field of animation industry to evolve the industry life cycle for the Saudi animation. Therefore, this study will investigate how the multiple case study countries encourage knowledge diffusion within the animation industry and what are the factors that assist and facilitate this knowledge creation and diffusion.

It is widely assumed that knowledge is the rationale of competitive between firms (Malmberg and Power, 2005). Broadly speaking, that establishing industrial cluster encourages the knowledge diffusion. Thus, it has been highly recommended by policy makers for developing a given industry (Weber, 1929; Marshall, 1980; Porter, 1990; Baptisa & Swann, 1998). Therefore, in this study it is essential to review cluster theory to understand how this phenomenon assists knowledge diffusion. In particular, it will consider the issue of establishing epistemological clusters (Hakanson, 2005; Huggins, 2008; Evers et al, 2010).

2.1.3 Cluster Theory

As this study seeks to develop a strategy to encourage the life cycle evolution of the Saudi animation industry, it is fundamental to review cluster theory. This is because reviewing the literature of cluster theory will provide a useful analysis of the dynamic of industrial development through knowledge diffusion, which has been identified by Grant (2005) as one of the important drivers for the industry development life cycle (see section 2.1.2.3.2). In addition, this study used cluster theory as a lens for the selection samples from each case study animation industry. In fact, the topic of geographical concentration in industry or as it is known industrial clustering, has been studied from different theoretical angles such as how this phenomenon exists and why; its advantages and disadvantages; and the relation between industry concentration and innovation (Ketels, 2003). One significant perspective of research occupied by industry development theory considered the establishment of clusters as one of the productivity drivers, which has encouraged its adoption by many policy makers (Porter, 1990, Wickham, 2005).

In the following sections, the research will focus on the identification of the industry cluster theory from different viewpoints, including the origin of cluster theory followed by the rationale of the creation of industrial clusters, highlighting the issue of knowledge spillover. After that, the study reviews the literature of epistemological clusters.

2.1.3.1 *The origin of cluster theory*

The phenomenon of concentration of specific industries in one geographic area has been recognized throughout history among industries as varied as textiles in Italy; the ship building industry in Glasgow; steel in Pittsburgh; the film industry in

Hollywood; the high-tech in the Silicon Valley and finance in London (Porter, 1990; Kuah, 2002; Whitehurst, 2006). This has led to cluster theory attracting the attention of economists and researchers over the years, including Weber (1929); Marshall (1980); Porter (1990); and Baptisa & Swann (1998). Industry clustering has recognised under a variety of terminologies including: Geographic Agglomeration; Spatial Agglomeration; Localized Industries and Industrial Districts (Asheim et al, 2006).

According to Singh (2003), there are several different definitions for clusters, including

“A geographic concentration of interconnected companies and institutions in a particular field; a group of inter-related industries that drive wealth creation in a region primarily through the export of goods and services; a group of industries whose linkages mutually reinforce and enhance their competitive advantage. They can be each other's consumers, competitors, partners, suppliers or research and development sources” (Singh, 2003, p5).

Porter developed the concept of clusters in his book *The Competitive Advantage of Nations* (1990) and it is widely believed that he is the main modern promoter of the cluster concept (Singh, 2003). However, long before Porter's work, in 1890, the economist Alfred Marshall reflected the cluster concept in his work on industrial districts while looking for a term to refer to the local concentration of a specific activity in a particular place, which he termed agglomeration theory (Marshall, 1890). Quite distinctly, Marshall attempted to anchor the rationale of a recognizable pattern in the economic map (Asheim et al, 2006). Marshall has been criticized due to his

failure to interpret the start-up process of industry concentration and the reasons for such clusters being in particular places (Martin et al, 2002). However, there is some argument that Porter's cluster theory is only a revival of agglomeration theory as explored by Alfred Marshall (Singh, 2003). Furthermore, Porter's cluster concept has also been criticized because the benefit of high technology proximity seems to no longer be as important. In spite of these criticisms, several pieces of research support the effectiveness of cluster theory in economic development (Baptisa & Swann, 1999; Kuah, 2002; Singh, 2003).

2.1.3.2 The Rationale for Cluster Creation

Broadly speaking, knowledge spillover is considered to be the main force behind cluster creation (Marshall, 1890; Jacobs, 1969; Baptista, 1996). This is because being within an industrial cluster allows firms to gain benefit from knowledge diffusion at low cost (Doring and Schnellenbach, 2006). Therefore, economists argue, establishing clusters encourages industry development as it facilitates knowledge creation and diffusion, which are major drivers of the evolution of the industry life cycle (Grant, 2005). The term knowledge spillover is defined variously by economists as the exchange of ideas among individuals (Carlino, 2001); knowledge flows that occur spontaneously, and without any compensation to the knowledge source (Jaffe *et al.*, 1993); and intellectual gains through exchanges of information for which direct compensation to the producer of the knowledge is not given, or for which less compensation is given than the value of the knowledge (Kesidou and Romijn, 2008). To understand how knowledge spillover occurs, it is important to shed light on

knowledge creation processes and knowledge types. Scholars have classified knowledge into two types: tacit knowledge and explicit knowledge. The term tacit knowledge refers to the types of knowledge that cannot be conveyed by a person to another by coding or written words: that which is difficult to transfer. However, explicit knowledge refers to the types of knowledge that can be expressed verbally or in other representations (Nonaka and Teece, 2001).

The creation of knowledge passes through four stages. The first stage is socialization, in which the new tacit knowledge is translated via shared experiences and is usually converted through informal social meetings between different firms or between firms and customers or suppliers. In the socialization phase, observation and simulation are considered to be important methods for learning (Nonaka and Teece, 2001). The second stage is externalization: in this stage, the tacit knowledge transforms into explicit knowledge and becomes available for external use: the knowledge is coded to share it with others (Nonaka and Teece, 2001; Siadat et al, 2012). The third stage is combination: in this stage, the explicit knowledge turns into sets of complicated explicit knowledge by combining different forms of explicit knowledge together and developing them further. The fourth stage in the knowledge creation process is internalization, in which the explicit knowledge is converted to tacit knowledge. In other words, in this stage explicit knowledge is embodied and becomes a part of an individual's tacit knowledge (Nonaka and Teece, 2001). Knowledge spillover is unlikely to occur with tacit knowledge, as it is unencoded. However, it could transfer through face-to-face interaction, which is likely where businesses are found within the same location (Hakanson, 2010). Thus, this supports Porter's (1998) assumption about the advantages of being within industrial clusters, which thus remains

important, even in light of modern communications technology. In fact, the role of location has been identified in the animation industry development research as still being highly significant (Scott, 2000; Florida, 2002; Yoon, 2008; Dai et al, 2013). Therefore, this study retains location as a key research framework factor. This study will investigate how location could encourage the development of the animation industry life cycle.

2.1.3.3 Epistemological Clusters

As discussed above, sharing knowledge is the rationale of the industrial cluster, particularly if the industry depends on knowledge activities (Dahl and Pederson, 2002). Recently, researchers have also shown increased interest in the issue of epistemological clusters (Hakanson, 2005; Evers, 2008; Evers et al, 2010). The term epistemology derives from a Greek word that means knowledge (Merriam-Webster Dictionary, 2013). In the existing literature, there are several viewpoints about epistemological clusters, and thus, in this piece, different arguments about the meaning of epistemic communities will be highlighted. According to Evers,

“Knowledge clusters are agglomerations of organizations that are production-oriented. Their production is primarily directed to knowledge as output or input. Knowledge clusters have the organizational capability to drive innovations and create new industries. They are central places within an epistemic landscape, i.e. in a wider structure of knowledge production and dissemination. Examples of organizations in knowledge clusters are universities and colleges, research institutions, think tanks, government research agencies and knowledge-intensive firms” (Evers 2008, pp. 10-11).

From the previous definition of epistemological clusters, these are understood to refer to a geographic agglomeration of educational institutions and research centres as well as industrial firms that specialize in related industries. However, another argument offers a different belief about the meaning of epistemological clusters. Hakanson (2010) argues that any firm could be considered to be an epistemic community as it has different members with a variety of specializations and experience. In addition, he pointed out that geographical proximity is not important to the creation of such epistemic communities by describing epistemological clusters as communities made up of individuals with the same frames of reference and the same orientation of knowledge as it relates to particular social roles and is obtained from socialization of knowledge, normally through a synthesis of formal training and jobs experience. Hakanson's argument parallels Holzner and Marx's viewpoint of epistemic communities in which they pointed out "*The term epistemic communities... designates knowledge-oriented communities in which cultural standards and social arrangements interpenetrate around a primary commitment to epistemic criteria in knowledge production and application*" (Holzner and Marx, 1979, p. 108).

Moreover, Torre and Rallet (2005) believe that epistemic communities are networks that contain organizations in different locations in which they exchange knowledge and trust. Lawson and Lorenz argue that knowledge clusters that adopt networked policies have been considered more industrially competitive than those not adopting such networked approaches (1999). This is because the interaction between parties within networks is considered to be a channel for knowledge sharing (Nelson, 1986; Bozeman, 2000). Networks are not limited by geographic borders and have been employed as an instrument for exchanging knowledge between different geographic locations (Boschma and ter Wal, 2007). One of the world's largest and best-known

examples of a knowledge cluster based on networked economic activity is Silicon Valley. The networks in Silicon Valley are not only among local firms but also involve connected firms from different areas such as firms from India and China (Saxenian, 2005). Additionally, firms that have joined networks get the benefit from sharing knowledge even if they are located outside the district more than firms within the same district who are not joined with the network (Breschi and Lissoni, 2001). This flexible border of networks has assisted the establishment of new knowledge clusters in different areas that have been connected with existing knowledge clusters, such as Bangalore in India, which has developed through networking with Silicon Valley in California (Huggins, 2008). Networks issues were also discussed frequently within the literature of the animation industry development (see section 2.2.3). Therefore, networks are an important factor that will be investigated in the multiple case study countries to discover how networks are structured in the different stages of the industry life cycle, and the ways in which these have been used in these particular countries will be considered as part of the development of the Theoretical Model.

2.2 Animation Industry Research

The animation industry is a relatively emergent industry, yet it has attracted substantial attention and research not only in terms of animation as an entertainment instrument but also in terms of its impact on other fields such as economy and culture. The purpose of this section is to review prior investigations into animation industry development and to review the literature regarding different research attempts to address issues arising from these investigations.

2.2.1 Orientations of Previous Animation Industry Research

Academic research on the animation industry has grown in the last decade (Eliashberg et al, 2006). Generally, this research on the animation industry has focused on three areas. Firstly, much has been written on the animation industry from a historical perspective. Scholars have written about pioneering animation within different countries, discussing historical development and examining the different methods and techniques used in early animation (Solomon, 1989; Bendazzi, 1994, Leant, 2000, Bendazzi, 2016). However, the historical development of the animation industry in Saudi Arabia has not yet been fully addressed and little is known about it. In 2016 Bendazzi began to tackle this issue in his book, *Animation-A World History*, identifying two pioneer Saudi animation makers; however, a gap in the literature remains with reference to the history of Saudi animation. Therefore, this study will attempt to address this lack.

In addition, much has been written on the animation industry from a cultural perspective, as this medium has a significant impact on culture (Wells, 2002). This is because animation can be considered a medium that can convey the cultural identity of a nation (Cohen, 1997). Scholars have discussed the ways animation has employed stereotyped representation, and where it conveys an incorrect or biased picture of a particular nation or group (El-Farra, 1996; Lehman, 2006; Barker, 2010; King et al, 2010; Ridouani, 2011). In addition, such work has discussed how foreign animation could manipulate the cultural identity of nations through cultural imperialism (Treat & Kinsella, 2001; Manion, 2005; Muthalib, 2007; Omar & Ishak, 2012).

In a Saudi context, imported animation that is broadcast by local television channels is one of the factors that affects public culture in Saudi Arabia (Alotaybi, 2007). A

study by Aljohani (2000) showed the impact of animation from different cultures on Saudi children's attitudes and manners, as these display different values to those upheld by the Saudi community. This study was supported by Abadislami's (2006) study, which showed that 96% of Saudi preschool children used animation cartoons as a cultural source, and that of these cartoons, 70% were outsourced from a foreign culture. Around 78.44% of imported children's animation cartoons in Saudi television are dubbed animation, whilst 49.19% is animation in the original language of the producing country (Algaydi, 2002). A further study by Erqsous (2014), on the social and behavioural impacts of a number of the most popular imported animations on Saudi society, also raised concerns and recommended the development of indigenous Saudi animation.

Another area that has attracted global researchers to the animation industry is the issue of development within the animation industry. This is because of its impact on a country's economic growth; it is considered to be a major driver for entertainment products such as merchandising, DVDs, and toys that generate high revenues (Eliashberg et al, 2006). In the existing literature, most of the researchers concerned with animation industry development are from North American and European countries such as Canada, the USA, and the UK (Bryman, 1997; Tschang & Goldstein, 2004; Wesson, 2010; Westcott, 2011; Cole, 2014), or from Asian countries that used to be outsource hubs, such as Korea, the Philippines, China, India, Malaysia, and Bangladesh (Tschang & Goldstein, 2004; Thomas & Rayadurgam, 2005; Muthalib, 2007; Wu, 2010; Yoon, 2010; Lee, 2011; Islam et al, 2013). Only one study has been conducted on the issue of animation industry development in Arab countries (Alrimawi, 2014). Hence, in the following section, a critical review of this literature

will be presented in two subsections to identify the gap that this thesis seeks to address.

2.2.2 Research on Arab Animation Industry Development

In terms of Arabian countries, only one study has been identified that is concerned with an aspect that could be accounted relevant to animation industry development, which is the Alrimawi study (2014). However, his study focused on addressing the issue of animation content in Arabian cinema through researching the challenges faced by Arab animation in terms of entering the international cinema market. In chapter two of his thesis, he presented a section titled “*The challenges faced by Arab Animation Cinema*”, wherein he used a descriptive approach to discuss the key challenges faced by Arab animation makers, which included the lack of animation academies, high budget costs, absence of government support, and marketing issues. Alrimawi’s study (2014) would have been more relevant to the current study if it had discussed different approaches to overcoming these challenges, but his main focus was on finding solutions to representation in Arab cinema. No attempt was made in Alrimawi’s study to identify the barriers that constrain industry life cycle evolution in Arab countries or to find ways to encourage its development. Therefore, this thesis seeks to fill this gap by conducting a study of the animation industry in Arabian countries from an industrial development perspective.

2.2.3 Research on Global Animation Industry Development

The concept of animation industry development has attracted many scholars in the last decade (Eliashberg et al, 2006). However, in terms of the existing literature, most

of the researchers concerned with animation industry development are from North American and European countries such as Canada, the USA, and the UK (Bryman, 1997; Tschang & Goldstein, 2004; Wesson, 2010; Westcott, 2011; Cole, 2014), or from Asian countries that used to be outsource hubs such as Korea, the Philippines, China, India, Malaysia, and Bangladesh (Tschang & Goldstein, 2004; Thomas & Rayadurgam, 2005; Muthalib, 2007; Wu, 2010; Yoon, 2010; Lee, 2011; Islam et al, 2013). In the following section, a review of the available literature on animation industry development will be presented.

A study by Flaxman (2003) discussed the issues faced by the animation industry in terms of availability of qualified workforce. Her study showed that graduates with animation degrees struggled to find appropriate jobs. In addition, she stated that animation firms' managers could not find appropriate candidate with the required qualifications. Flaxman's study (2003) argued that these problems were evidence of a failure of animation programmes to prepare students for the industry, which in turn affected the development of the whole animation industry.

This study is in agreement with a study by Muthalib (2007) about the problems faced by the Malaysian animation industry. Muthalib (2007) revealed that the absence of competent labour for animation is one of the main obstacles that prevented local Malaysian animation from competing globally. He argued that this was due to a shortage of higher education institutions, with a focus on providing students with 3D computer animation skills only. Consequently, there was an absence of graduates with sufficient skills in cell animation techniques, which is a core skill that the animation industry depends on; lack of it results in weakness in the quality of the animation

produced. Muthalib (2007) argued that higher education institutions should provide students with knowledge that covered a variety of animation techniques to prepare them as competent labour. However, his study failed to consider how higher education institutes should prepare animation students as qualified labour.

Likewise, a study by Wu (2010), which discussed the Chinese animation industry, argued that the gap between skills providers and active industry is one of the challenges that face the Chinese domestic animation industry. This is because what universities offer to animation students does not meet industry requirements for new entrants. His argument is that the animation courses focus on developing students to be animators by covering aspects such as design, drawing, colouring, and animation while neglecting the skills of other positions within the animation industry such as directing, modeling, scriptwriting and producing. Although Wu (2010) identified the fact that there is a gap between higher education and industry in this field, his study was limited to assigning this gap to the lack of provision of skills for students for a variety of different career positions within the animation industry. However, no attempt has been made to identify how higher education institutions could overcome this gap in practice.

A similar study was conducted by Suwannatat (2012) that emphasised the collaboration between animation programmes in higher education and firms within the animation industry in Thailand. Suwannatat (2012) argued that this collaboration enhanced the Thai animation industry through boosting knowledge diffusion. In particular, this study focused on developing a conceptual model to encourage such collaboration.

A further study discussing the issue of animation industry development was conducted by Cole (2008). His study discussed the role that networking between different European animation industries played in supporting improvement in the industry through encouraging knowledge exchange that overcame geographical and cultural distances. Although there are also several different studies that show that geographic proximity is effective in promoting knowledge diffusion to assist industry development (Marshall, 1920; Weber, 1929; Porter, 1980; Baptisa and Swann, 1998), Cole's (2008) study demonstrated that networking using temporary proximity occasions such as festivals, conferences, and market places can create a substitute for geographic proximity creative clusters such as Hollywood. Cole argues that European animation networking has succeeded in employing the temporary cluster effectively as a platform that assists learning and collaboration among firms that are both geographically and culturally distant. However, Cole's study focuses mainly on networking in European countries that generally have Mature and Established Growth animation industries. Yoon & Malecki (2010) and Lee (2011) discussed production networks within a different context. These studies targeted Asian countries that have been considered outsource hubs for animation such as Korea, China, and the Philippines. These studies highlighted how networks have assisted these Asian countries in developing their own domestic animation industries. Likewise, Garmann's (2011) study, which discusses the networks between animation firms in Oslo, demonstrates that networking is an essential source for establishing business in animation. In addition, this study shows that animation firms in Oslo depend on networking with one another to complete their projects successfully. Garmann's

(2011) study attributes this dependency on networking to the fact that the animation in Oslo is considered a new art.

A further study that has discussed the issue of animation industry development is Qin (2006). This study highlighted the ways that the governments in Japan and Korea have reinforced the local animation industries. According to Qin (2006), the Japanese government supports the development of local industry through reducing the tax on exports of local animation production to attract local and international buyers; it also established the Tokyo Anime Center to promote Japanese animation. Qin's (2006) study also discussed the support that government in Korea provides and how this has contributed significantly to the development of local animation by providing a generous financial fund to increase the productivity of local animation firms. In addition, the Korean government has adopted policies that have resulted in increasing the demand for local production by limiting the availability of imported animation content.

Similar studies addressing government support for the animation industry were conducted by Zhang (2006) and Fung (2007). These studies discussed the role of the Chinese government in supporting its domestic animation industry. China emulated Korea's strategy by adopting a limited quota policy. In 2000, the policy was that Chinese television channels must seek approval to air imported animation. This policy was followed by an additional one in 2004, which stated that 60% of animation quotas must be from domestic production. However, in 2006, the policy set new regulations further favouring domestic animation, which banned broadcasting imported animation between 5pm and 8pm. As a result of this regulation, the demand for local animation

has increased, which has assisted the development of the animation industry in China. Government support for the animation industry was also covered in Wesson (2010). This study discussed the different tax credits that the government in Canada offers to the animation industry, which attract foreign producers to co-produce with animation firms in Canada.

A further study examining animation industry development was conducted by Konagaya and Tomisawa (1999). Their study focused on the agglomeration of animation firms in a particular city in Japan. Their study found that the rationale of this agglomeration is to benefit from cooperation among the workforce. Yamamoto's (2010) study also covers the agglomeration phenomena, focusing on animation firms in Japan, South Korea, and China. His study discovered that firms prefer to locate their studios near to clients such as Television stations. He also found that firms seek to cluster in one location to facilitate coproduction. This is because several firms specialise in certain stages of the process, from pre-production, such as artistic and concept development aspects of the animation process, to production and post production.

Yoon's (2008) study sought to understand the location patterns of animation firms and why they cluster in particular locations. Her study mainly focused on Hollywood producers, trying to identify where the supplier and buyers of this global product are located. Yoon identified several major animation centres, where each city has more than 100 animation studios. These cities include New York, Los Angeles, Toronto, Paris, and London, as well as groups of animation studios in Asian countries including India, South Korea, and the Philippines. Yoon's (2008) study has clarified

the rationale for these concentrations, which is based on differing animation techniques. Cell animation studios concentrate where sufficient low cost skilled labour is available, while CGI animation requires a concentration of highly skilled workers. The limitation of Yoon's study is that it focuses on Hollywood producers and the location of their buyers and suppliers.

Another study from the animation industry that consider the location issue is Dai et al (2012), which investigated the drivers that motivated animation workers to settle in specific locations. In particular, the study focused on two cities, Beijing and Shanghai, where most animation is clustered in China. The study revealed that personal trajectory, a term referring to personal home town and place of graduation, determines where the workers in this industry settle and work. Although the study investigated this phenomenon in a less Mature industry, it did not cover the motivations that drive the agglomeration of animation firms in particular cities. However, the issue of animation firms' agglomeration was discussed in Egeraat et al (2012) study, which focused on the Irish animation industry. This study attempted to discover whether the location of animation firms in different spatial areas affected knowledge diffusion. The study findings demonstrated that location was not important in terms of knowledge diffusion due to the fact that the Irish animation industry depends on networking with overseas firms, and using these as a knowledge source. Egeraat et al (2012) thus disagreed with Seiji (2004), which examined the location issue within the animation industry in Japan. He found that animation firms sought locations near one other, and thus argued that this proximity reinforced the competitive advantage of Japanese animation firms as well as enhancing relationships between them.

From reviewing the relevant literature on global animation industry development, the researcher has identified four factors that are discussed most frequently and are emphasized particularly because of their impact on the development of local animation industries. These factors are: Higher Education Institutions, Networks, Governments, and Location. One criticism of much of the available literature on animation industry development is that it mainly focuses on more Mature industries such as North America and Europe, or established Growth countries that have extensive experience as outsource hubs such as Asian countries. Thus, they do not give sufficient consideration to different life cycle stages. Therefore, this study seeks to consider these factors in several different industry life cycle stages in order to identify the most effective factors to influence the overall evolution of the animation industry and its development in each stage.

2.3 Research Framework

As mentioned in section 2.2.3, there are four factors that have been discussed frequently with regard to animation industry development. These factors are: Higher Education Institutions, Networks, Governments and Location. Additionally, achieving competitiveness relies on three different levels of productivity: endowment productivity, macroeconomic productivity, and microeconomic productivity (Porter, 1990). Thus, this study will consider factors from all of these different productivity levels to understand how to enhance the overall productivity of the Saudi animation industry. This study will therefore consider location, which is classified as part of the first level of productivity, as one of the endowments that a nation has. In particular, it will examine how a location in a cluster influences the development of the animation

industry at different stages (see section 2.3.4). Moreover, this study will look at macro level productivity by investigating how higher education institutions (see section 2.3.1) and governments (see section 2.3.3) influence the development of the various stages of the animation industry life cycle, while in terms of micro level productivity, it will look at networks (see section 2.3.2). To accomplish this, this thesis has developed a research framework based on these four factors (Figure 6).

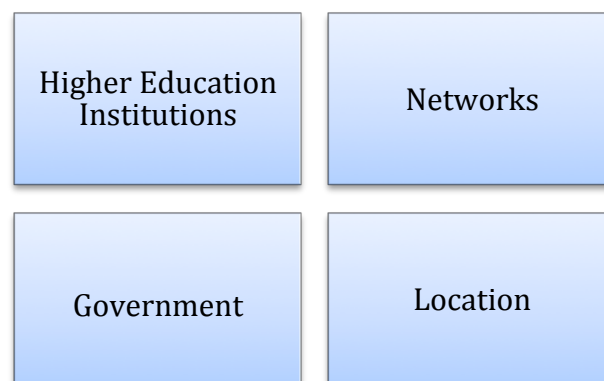


Figure 6: The four factors of the Research Framework

The findings emerging from investigation of these four factors (see chapter Five) will lead to an understanding of how these factors have contributed to the development of the animation industry within the multiple case study countries and highlight the strategies that they have been employed in (see chapter Six). In addition, as these four factors also have been previously considered in industry development research, each factor will be presented alongside a supporting study.

2.3.1 Higher Education

The existing research on animation industry development indicates that higher education institutions play a considerable role in industry development, and that thus any shortage within this factor will challenge industry development. One important role that the higher education institutions play in industry development is the provision of skilled labour (Bramwell & Wolfe, 2008). This is because skilled labour is a key industrial input, and any shortage of skilled labour causes challenges in terms of developing domestic industry (Porter, 1980). In fact, the role of higher education is highly considered in terms of industry development in general because the provision of skilled graduates is one of the contributions that universities can make to the development of indigenous industries (Nelles et al, 2005; Bramwell and Wolfe, 2008). In addition, higher education institutions play a major role in generating the seeds of new businesses and industries (Paytas et al, 2004; Smith, 2011). Therefore, this thesis seeks to investigate the situation and influence of higher education institutions in different industry life cycle stages to identify their strategies and how they contribute to the development of the animation industry life cycle.

2.3.2 Networks

Another factor that has been discussed frequently in the existing literature in relation to animation industry development is networks. Networks are defined as “*structures of relationships that exist within and between individual actors, firms and other organisations, necessarily contain elements derived from markets on the one hand and from hierarchies on the other*” (Wilson and Popp, 2003; pp.17-18). Networks are thus considered to be an important mechanism for diffusion of both types of knowledge: tacit and explicit (Hakanson, 2010). Tacit knowledge refers to the kind of

knowledge that cannot be conveyed by one person to another one by coding, making it difficult to transfer, while explicit knowledge refers to that knowledge that can be expressed by language or other symbology (Nonaka and Teece, 2001). As knowledge diffusion is one of the drivers that encourages industry life cycle evolution (Grant, 2010), networks are a major factor that encourages this evolution due to their role in such knowledge diffusion. In particular, tacit knowledge requires face to face interaction for transmission (Hakanson, 2010). In animation industry development research, the network role has been frequently discussed (Cole, 2008; Yoon & Malecki, 2010; Lee, 2011; Garmann, 2011); nevertheless, there remains a gap in terms of the issue of networks assisting the development of less-developed Growth industries such as those in Arab countries. Thus, this study seeks to study networks from the perspective of various stages of the industry life cycle by investigating networks within less Mature industries; this will be achieved through studying the Egyptian and Emirates animation industries to determine how networks affect these different stages of the animation industry life cycle. In addition, this study seeks to investigate networks within the Saudi animation industry, which is still in its Introduction stage.

2.3.3 Governments

According to Throsby (2001), governments have the power to protect cultural and economic development - besides that, business leaders and policy makers believe that governments are responsible for upgrading local economies (Singh, 2003). Previous literature has highlighted significant contributions made by various governments toward developing their local industries (Porter, 2001; Singh, 2003; Wickham, 2005; Evers et al, 2008). Within the research on animation industry development,

governments are a factor that has been frequently considered (Zhang, 2006; Qin, 2006; Fung, 2007; Lee, 2010; Wesson, 2010; Yoon & Malecki, 2010; Kenny & Broughton, 2011). However, all such studies focus on government support in key countries that already have Mature industries, and no attempt has been made to identify government support in countries with industries in the early Introduction stage when there are very high barriers to entry such as a shortage of workforce and cost disadvantages. Therefore, this research attempts to identify the different mechanisms of support that the government could provide to develop an animation industry that is still in its early Introduction stage, with particular reference to the Emirates animation industry, which succeeded in moving swiftly from its Introduction stage to an emerging Growth stage and has become animation hub in the Middle East and North African (MENA) region. Thus, this study will investigate government support at various stages of the animation industry life cycle within the multiple case study countries.

2.3.4 Location

Location is one of the factors that has been discussed frequently in the literature of animation industry development; indeed, location is considered a critical factor in industry development in general. Scholars, economists, and decision makers have emphasized location's role in the development of industries (Porter, 2000). The agglomeration of creative industries in particular locations is a noticeable feature (Yoon, 2008), although the phenomenon of agglomeration of specific industries in one geographic area has been recognized throughout history, including in the textile industry in Italy; the shipbuilding industry in Glasgow; steel in Pittsburgh; and

finance firms in London (Porter, 1990; Kuah, 2002; Whitehurst, 2006). The agglomeration of creative industries in particular has been critically studied in the existing literature (Christopherson & Storper 1989; Scott 1997, Scott, 2005) and agglomerations within the animation industry have also been studied (Konagaya & Tomisawa, 1999; Seiji, 2004; Yoon, 2008; Yamamoto, 2010; Dai et al, 2012; Egeraat et al, 2012). Capital, labour and knowledge diffusion all contribute to the rationale for the agglomeration of creative industries in an area (Pratt, 2000), but other factors may exist. Most of the existing literature focuses on investigating cases from Mature animation industries or outsource animation providers from Asian countries. Thus, the location factor has not been considered extensively in terms of less-developed Growth industries or in Arab countries. Thus, this thesis seeks to identify the motivation behind animation firms in emerging markets such as the Emirates concentrating in a particular place.

2.4 Summary

This chapter lays out the foundations of this study. It presents related theories, and in particular, it reviews the strategy theory as it is a theory adopted by this thesis, providing details of the research on which such strategy development is based. In addition, this chapter reviews the industry development theory that this research utilises as a lens, focusing on the industry life cycle concept, and providing identification of the different stages and the barriers that challenge industry development. Furthermore, the chapter discusses the main two drivers for industry evolution that will be used as a lens in this thesis, as well in developing a strategy for the development of Saudi animation. Alongside this, the chapter reviews cluster

theory, as the establishment of a cluster is generally considered to be a driver for industry development. In particular, the chapter identifies what a cluster means and what the rationales for cluster establishment are.

The second section of this chapter examines animation industry research. It begins by highlighting the main directions of existing animation industry research, and then focuses on the animation industry in the Arab world in order to identify the gap that this study seeks to fill, which is the issue of animation industry development in Saudi. After that, it critically reviews the available literature on animation industry development. The author identifies four significant factors that have been highly considered for their roles in the development of the industry. These factors are Higher Education Institutions, Networks, Governments, and Location. The author therefore utilises these four factors to form a research framework, thereby allowing this study to focus on identifying how these can contribute to the development of the animation industry in the multiple case study countries. Finally, this chapter highlights the research framework that the investigation will focus on. The next chapter will be the methodology chapter.

3 Methodology Chapter

This chapter clarifies the actions that were undertaken to achieve the research aims, research objectives and research questions in this study. It explains the methodology that this research utilises. It presents the justifications of selecting the methodology that the researcher used in conducting this research. Accordingly, in this chapter, the philosophy that underpins this study is introduced first, followed by a discussion on qualitative researches and justification of why this study selected it. Then, an explanation for adopting the case study approach is given together with a description of different types of case study research. After that, the issue of validity and reliability is explained and how this study utilised triangulation data to enhance quality and credibility. Moreover, a description of the most appropriate methods of collecting data for the research is presented, including document analysis, semi-structured interviews and site visits. Finally, this chapter discusses the thematic techniques that this research utilises for analysing the findings.

3.1 Research Philosophy

Identifying the research paradigm is a fundamental step before starting the research. Oates (2005) defined the research paradigm as “*a set of shared assumptions or ways of thinking about how to do research and gain knowledge*” (Oates, 2006, p. 282). Kuhn (1962) defined paradigms as “*universally recognised scientific achievements that for a time provide model problems and solutions to a community of practitioners*” (Kuhn, 1962, p. viii). In fact, there are two main research paradigms or philosophies: positivist and interpretivist (Collis & Hussey, 2013). In the positivist philosophy, the researcher should attempt to achieve objectivity by discovering truths that can be

replicated by other researchers. Positivism uses scientific methods to test theories. The positivist methods depend on formal logic and statistical assumptions (Myers, 1997). On the other hand, interpretivist philosophy emphasises constructivist approaches. Interpretivism depends on the view that reality is subjective and multiple (Creswell, 1994). It seeks to understand the deep structure of given phenomena from the cultural and contextual settings. Interpretivism usually focuses on the participant's interaction and contexts. Therefore, this philosophy utilises naturalistic methods to answer the research's questions or to develop theories or description. Interpretivist research usually involves qualitative methods such as interviews, observation and analysis of existing texts because these methods are appropriate for ensuring sufficient interaction between researchers and participants in order to collaboratively construct a meaningful reality (Yin, 2013).

The interpretivist paradigm underpins this study. To justify the selection of this particular philosophy, the following points explain the rationale. This study is concerned with understanding the dynamic of the animation industry at different stages of development. Besides, it seeks to understand how research framework factors, which include higher education institutions, networking, government and location – and that represent a complex social structure that many different people are involved in – affect the industry life cycle evolution. This complexity is appropriate for studying via the interpretivist approach because this philosophy focuses on an *“inductive process that offers explanations through careful examination and interpretation of events”* (Pratt, 2011). Furthermore, as mentioned above, Interpretivism focuses on participants' interactions and contexts through relying on qualitative methodology. The qualitative methods adopted therefore allow the researcher to assess the participants' interactions within and responses to social

structures and contexts. This approach enables the researcher to study empirically the factors that might support or obstruct the development of the animation industry.

3.2 Qualitative Research

This study utilises qualitative methodology, which is defined as “*a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem*” (Creswell, 2009, p. 4). In fact, the concept of qualitative research developed between the late 1800s and early 1900s. In particular, it rose from the anthropological studies of the indigenous cultures (Creswell, 2005). However, the term qualitative research was not used until the late 1960s (Bogdan & Biklen, 1992). Qualitative research has specific characteristics and aims to understand the different aspects of social lives, such as people’s perspectives and experiences. Furthermore, qualitative research differs in its methods, which use words rather than the numbers used in quantitative research (Brink, 1993).

The rationale for using qualitative methods is that it effective in identifying factors such as social norms, socioeconomic status, ethnicity and religion, which are considered as a intangible factors that are difficult to measure through quantitative methods concerned with numbers. Moreover, qualitative studies seek to answer what, why and how questions (instead of how much and how many), which are appropriate for this study that seeks to establish why the Saudi animation industry remains in its infancy and what are the barriers that have constrained its life cycle evolution to move to from its introduction to its growth phase. Furthermore, this study attempts to identify how the research framework factors affect the development of the different

stages of the life cycle of the animation industry within the multiple case study countries and what strategies they have adopted, rather than finding numerical data about the animation industry in these countries.

3.3 Case Study Research

Although the case study has been considered as a choice of what to study instead of the methodology (Stake, 2005), there are many scholars who believe that it is a methodology or research enquiry (Creswell, 1994; Merriam, 1998; Yin, 2013). This thesis uses case studies as a research methodology. According to Creswell “*case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded system (cases) over time, through detailed, in depth data collection involving multiple sources of information, and reports a case description and case-based themes*” (Creswell, 1994, p 73). Denscombe (2014) stated that case studies are characterised by:

- in-depth study
- a focus on relationships and processes
- their natural setting
- multiple sources and multiple methods.

The above characteristics justify the researcher’s selection of this methodology to be adopted in this thesis as it assists to capture a holistic view of the phenomenon cited by the investigator. Thus, this study selected the case study methodology to establish an in-depth understanding of the development of the animation industry for the selected studied countries in their natural setting. To achieve an in-depth understanding of the animation industry, this study used multiple sources for data and multiple methods to collect the required information (see section 3.5).

Yin (2013) signposted that “*case studies are used in many situations, to contribute to our knowledge of individual, group, organisation ... not surprisingly, the case study has been a common research methods in ... political science ... business, education, nursing and community planning. Case studies are even found in economics in which the structure of a given industry or the economy of a city or a region may be investigated*” (Yin, 2013; p4). Yin’s (2013) viewpoint supports the utilisation of a case study approach in this study because it seeks to investigate how the different research framework factors encourage the development of the animation industry life cycle, where each one of these factors belong to different areas such as education, business and policy. Thus, adopting a case study methodology assists to link these different factors together.

In addition, there are two types of case study research: single and multiple case studies. Each type is appropriate for a particular purpose. The single case study aims to conduct more intensive and detailed research, while with multiple case studies, each case study requires less intensive and less detailed research because they focus on a holistic view rather than a detailed one (Lor, 2011). However, the evidence of multiple case studies is more persuasive, which makes the overall study stronger (Yin, 2013). Therefore, this study selected the multiple case study approach as it attempts to capture the holistic outlook for the animation industry in the different countries to establish an understanding of how the industry has developed in each country. Moreover, this study focuses on investigating the four factors of the research framework within the multiple case study countries to find out how these factors have encouraged the development of different industry life cycle stages in order to extract strategies for developing the Saudi animation industry.

In fact, Yin (2013) argues that the selection of case studies is required to be theory driven. Therefore, the rationale for selecting these particular countries to be studied is driven by the theory of industry development, in particular, the life cycle concept, where each country represents a different stage of the industry life cycle. In this study, the UK animation industry represents a Mature industry, while the Egypt animation industry represents an established Growth industry and the Emirates animation industry represents an emerging Growth industry. A detailed description about the reason for selecting each case study is presented in Chapter Four, where it provides a section for each case study.

3.4 Validity and Reliability

The demonstration of validity and reliability is an essential requirement because validity and reliability are vital aspects in both quantitative and qualitative research as they determine whether the research is strong or not (Brink, 1993). Validity in research refers to the accuracy and truthfulness of the study findings (Le Compte & Goets 1982, p32). Reliability refers to the ability of a research method to produce steadily the same results over repeated testing periods (Brink, 1993). In quantitative research, the validity and reliability depends on instrument construction and each one is viewed separately (Golafshani, 2003). However, in qualitative research the validity and reliability depends on the researchers' efforts and both are viewed as one issue (Golafshani, 2003). In fact, in qualitative research, the terms validity and reliability are usually replaced by terms that combined both, such as credibility, trustworthiness, truth, value, applicability, consistency and conformability (Brink, 1993). To demonstrate the validity and reliability in this qualitative study, triangulation of data collection methods are utilised. Hence it involves multiple tools and techniques that

add multiple insights to the research, which improves quality and accuracy. Thus, it is used to enhance the validity and reliability of the research (Golafshani, 2003). Triangulation is defined as “*a validity procedure where researchers search for convergence among multiple and different sources of information*” (Creswell & Miller, 2000, p.126). In other words, this study employs different data collection tools because this study is considered as descriptive case study research, which involves reporting detailed description about the research topic of the animation industry in Saudi Arabia as well as the selected case study countries.

This research employs document analysis, observation and interviews as tools to gather data. Gathering data from different sources avoids the presence of a researcher’s subjectivity (Brink, 1993), as the researcher’s subjectivity is considered one of the common risks that can face the credibility of qualitative study, which may influence the trustworthiness of study findings. According to Patton (1999):

“This means comparing and cross-checking the consistency of information derived at different times and by different means within qualitative methods. It means:

- (1) Comparing observational data with interview data.*
- (2) Comparing what people are saying in public with what they are saying in private.*
- (3) Checking for the consistency of what people say about the same thing over time.*
- (4) Comparing the perspectives of people from different points of view” (Patton, 1999, p195).*

To apply what Patton has suggested to enhance quality and credibility, this study compared the data that is gathered from the interviews with the available information on official websites for related government bodies and the selected higher education institutions including official documents for reports and programmes (see Figure 7).

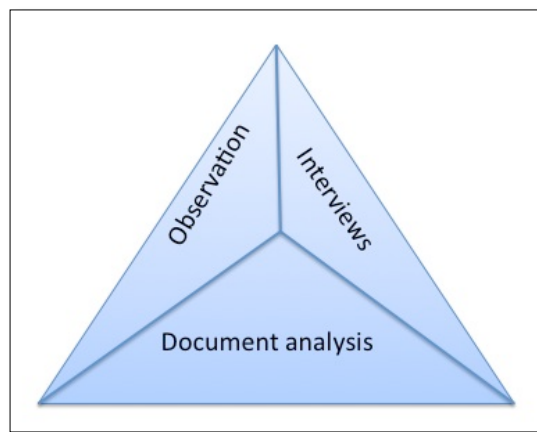


Figure 7: Triangulation of data collection tool

Moreover, this study compared interview data with what interviewees said in public, as the empirical study involved attending presentation talks for some of the selected case studies higher education institutions where the course leaders introduce the course strategy and approaches. Beside that, attending industry talks through networking events where animation studio managers discussed related issues to what this study attempts to find. Furthermore, this study used recorded and online interviews that were conducted with some participants by different parties to compare with the research interviews with the same participants. The observation data was also triangulated with what the interviewer had been told from interviews and with what was available through official documents. The observation used during the study visit

was of where animation courses are taught and their facilities; and when attending events including animation festivals and the animation marketplace. Additionally, this study employed triangulation of participants' views. For example, in higher education institutions, course leaders were interviewed because they are responsible for transferring knowledge to students, while students were interviewed as receivers of that knowledge. On the other hand, studio managers also were interviewed to give feedback to assess whether the outcomes (the training of the students) of the higher education institutions are appropriate.

3.5 Data Collection Methods

Case studies involve reporting detailed description. As mentioned above, triangulation of data collection methods were used. The tools that were employed to gather data include: document analysis, semi-structured interviews and observation. In the following sections, each tool is explained in detail.

3.5.1 Document Analysis

There are a wide variety of documents that are employed in this thesis to establish a holistic picture of the animation industry within the multiple case study countries. These documents include written and non-written materials. The written documents comprise online newspapers, magazines, government reports, education documents, official websites, blogs and social media accounts such as Facebook and LinkedIn. On the other hand, non-written materials include television programmes and online audiovisual recordings. These written and non-written materials are used as sources for gathering data related to the industry analysis for the Saudi animation industry and the multiple case study countries (see Chapter Four). In other words, they are utilised

to establish reliable data, analyse specific strategic approaches and positioning, as well as ideological underpinning. Furthermore, this document analysis contributes to establish a background before conducting the primary research and answering research sub-questions related to the research framework factors that could not be obtained by interviews. Additionally, it was used to triangulate the findings of interviews to provide confirmatory evidence of the information obtained from primary study, as suggested by Patton (1999), which enhances the credibility of the study findings.

For the UK animation industry analysis, the document analysis relies mainly on reports that have been obtained from official government bodies such as Creative Skillset, one of the sector skills councils related to the creative industry in the UK. Moreover, data was available from official websites for the animation programmes within the selected universities. Moreover, there are a good number of online audiovisual recordings, such as summits and industry talks, accessed through YouTube or official websites that are available as the online archive of conferences and festivals websites.

On the other hand, document analyses of the animation industry in Saudi Arabia, Egypt and Emirates were dominated by education documents obtained from the official websites of the selected institutions, online magazines, online newspaper articles, blogs and social media accounts because there is a lack of information available on official government body websites, while the non-written documents for these case studies includes television and online audiovisual recordings that were available on YouTube.

3.5.2 Interview

The interview is the most common tool used in qualitative case study research (Yin, 2013). According to Kvale “*the interview is a conversation that has a structure and a purpose determined by the interviewer*” (Kvale, 2007, p.7). Interview technique could be used as the main tool for gathering data or alongside other collection tools (Yin, 2013). In fact, using interview has a common advantage as it allows the researcher to obtain detailed information. However, one of its drawbacks is that it is expensive and time consuming (Kvale, 2007). Interviews differ depending on their purposes, openness and structures. Broadly speaking, interviews are categorised into three categories: unstructured, semi-structured and structured (Yin, 2013). The unstructured interview is distinguished by fewer boundaries. Additionally, researchers have the opportunity to ask questions that emerge from interviewees’ responses during the interview (Bryman & Bell, 2007). Conversely, the structured interview is similar to the questionnaire because it is characterised by standardisation, where all interviewees have the same questions and the questions are usually closed ended (Yin, 2013). The semi-structured interview combines features from the previous two categories because the questions are predetermined, while the researcher has the right to ask sub questions that emerge from any point during the interview (Kvale, 2007). This study employed the semi-structured interview because of its flexibility and ability to obtain more detailed information from the interviewees. Furthermore, semi-structured interviews allow the researcher to explore contradictions and gaps by asking sub questions to cover particular points.

This research aimed to conduct interviews using face-to-face approaches, although it is time and cost consuming, as the researcher has to travel to different locations within the UK and outside the UK to Saudi Arabia and the Emirates to conduct interviews and undertake site visits. Nevertheless, due to some interviewee preferences, interviews were conducted by telephone or online via Skype and email. However, for the Egypt case study it was difficult to travel due to the political and security situation in Egypt since early 2012 up to this year, 2016, as there were regular protests in Cairo and there have been violent clashes between opposing groups and the security forces (gov.uk, 2014). Therefore, the interviews were conducted online via Skype and telephone. However, during the study visit to the Emirates, face-to-face interviews with animation studio founders from Egypt were managed as these interviewees were travelling from Egypt to the Emirates to participate in the media fair that was held in Dubai in the Emirates. The researcher was informed in advance by the event manager about the participants from Egypt, which assisted the arrangement of the interview before conducting the study visit. Interviews with participants from the UK were conducted in the English language. However, interviews with participants from Saudi Arabia and Egypt were all conducted in Arabic, while some participants from the Emirates were interviewed using the English language as they were from Germany and India.

3.5.2.1 Sample

Broadly speaking, different aspects need to be tackled before selecting the research sample, including: who are your interviewees? How many interviews to conduct? How much data should be collected? (Miles and Huberman 1994; Patton, 1990). Sampling differs between quantitative and qualitative inquiries. While quantitative

studies use large random sampling, qualitative studies often use small non-random sampling (Patton, 1990). As this research is classified as a qualitative case study, it adopted non-random sampling. The non-random sample is classified into three categories: accidental, quota and purposive (Walliman, 2010). This study selected purposive sampling, which is also known as purposeful and theoretical sampling. The term purposive sampling refers to selecting information-rich participants from which one can learn a great deal about the purpose of the research (Patton, 1990). Purposive sampling is one of the most common sampling strategies that are effective in understanding a particular group because it selects participants according to pre-selected criteria relevant to a particular research question. Therefore, this study utilised purposive sampling in the parts it focuses on key individuals who possess knowledge of various aspects of the animation industry. There were 46 interviewees in total, including animation studio managers, animators, animation course teachers, animation students and government representatives. In the appendix, a detailed list of the interviewee names and occupational positions are presented. The number of samples is determined by the purpose of the interview and type of interviewees (Cohen et al, 2007). In this research, the interview seeks in-depth understanding and the interviewees are key individuals who possess knowledge. Therefore, the research selected a small sample for each of the studied countries. Patton (1990) argues that in-depth information from a small number of people can be highly valuable, especially if the cases are information-rich. According to Kvale (2007) “*Interview as many subjects as necessary to find out what you need to know*” (Kvale, 2007, p.43).

As this study seeks to investigate location as one of the research framework factors, the individual samples for all the interviewees were selected from where the

animation industry is clustered in each country. In particular, London, Bristol and Manchester were selected from the UK; Cairo from Egypt; and Dubai and Abu Dhabi from the Emirates. Moreover, since this study attempts to investigate the higher education institution as one of the research framework factors, it selected one institution from each cluster to focus on. These institutions are the following: for the UK, it selected Middlesex University in London; the University of the West of England in Bristol and Salford University in Manchester; for Egypt, it selected the Higher Cinema Institution in Cairo and for the Emirates it selected the Cartoon Animation Academy in Abu Dhabi and Zayed University in Dubai.

3.5.3 Observation

A site visit approach was employed in this research study to allow the utilisation of observation as a tool for data collection. Observation is “*a method of recording conditions, events and activities through non-inquisitorial involvement of the researcher*” (Walliman, 2010; p195). There are two categories for observation: direct observation and participant observation (Yin, 2013). Direct observation refers to observation that involves a researcher visiting the case study site where the researcher can combine observation with different data collection activities such as interviews or focus groups. On the other hand, participant observation refers to observation that the researcher conducts through being involved in an active role as participant within the case study situation such as playing the role of a teacher to observe students in class. In this study, the direct observation strategy has been adopted in conjunction with interview.

Different sites were visited in order to collect data for this research between 2012 and 2014. These sites included a number of selected higher education institutions and networking events. All these sites were selected for visits because they are located where the animation industry is clustered in the studied countries. In particular, the selected higher education institutions were visited to conduct interviews with animation course leaders and animation students, attend presentations about the animation courses delivered by the course leaders and take notes about the environment and conditions of the facilities that have been used within animation courses such as capacity and quality of classrooms, computer labs and special equipment. In Saudi Arabia, four institutions were visited: Princess Nourah University in Riyadh, and King Abdul-Aziz University, Effat University and Dar Al Hekma College in Jeddah. In the UK, three universities were visited: Middlesex University in London, University of the West of England in Bristol and Salford University in Manchester. In the Emirates, the Cartoon Network Animation Academy in Abu Dhabi and Zayed University in Dubai were visited. Furthermore, as mentioned in the previous document analysis subsection, the researcher examined a number of different higher education institutions via their official websites where there is valuable information about the animation courses including course modules, course plans, biographies of staff and images and video footage of classrooms. In addition, visits were undertaken to supportive events including The Big Entertainment Show 2013 in Dubai and the London Animation International Film Festival 2014 in London to collect data about the conditions and environment for this event, which reflect some of the available infrastructure. These visits included undertaking interviews with attendees and participants.

3.6 Result Analysis

The results analysis for the case study research involved producing a detailed description of the selected case studies. The analysis of the findings is one of the most challenging actions in conducting case study research, because the analysis techniques remain ill-defined (Creswell, 2007). Prior to analysing the results, it is important to identify the purpose of the analysis in order to select the appropriate analysis methods. The purpose of the analyses in this study are to explore and describe how the research framework factors, which include Higher Education, Networks, Government and Location assisted the development of the different stages of the animation industry life cycle within the multiple case study countries, and to establish which factors are the most effective in encouraging the development of the industry life cycle at each stage. Due to the fact that this research adopts a qualitative case study methodology, it was mainly required to collect the data through qualitative collection instruments including semi-structured interviews, document analysis and observation. Therefore, it is more appropriate to use an analysis technique that allows the researcher to examine and interpret this qualitative data. Thus, this study utilises thematic analysis, which aims to examine the meaning of the qualitative data in order to provide a classification of themes within data (Dey, 2003). Thematic analysis enables the researcher to analyse any forms of qualitative data such as interview transcripts, policy documents, images, observation notes and video recordings (Gibson, 2008). According to Boyatzis (1998), thematic analysis is one of the qualitative analysis techniques employed to analyse classifications and present themes that relate to the data through interpretations (Boyatzis 1998). Moreover, Alhojailan (2012) pointed that:

“Thematic Analysis allows the researcher to determine precisely the relationships between concepts and compare them with the replicated data. By using, thematic analysis, there is the possibility to link the various concepts and opinions of the participants and compare these with the data that has been gathered in a different situation at different times during the project. All possibilities for interpretation are possible” (Alhojailan, 2012, p10).

In fact, thematic analysis involves several phases. These phases include data reduction, data display and data conclusion (Miles & Huberman, 1994). The first phase, which is data reduction, required the researcher to be familiar with the data. In order to be familiar with the data, the researcher should transcribe the data that has been collected into written form. This transcription allows the researcher to read it many times before moving to the data display stage (Miles & Huberman, 1994). In this study the interviews were transcribed to facilitate the reduction process. Most of these interviews were obtained in Arabic, as it is the main language of three of the studied countries (Saudi Arabia, Egypt and the Emirates). Thus, the transcripts were also written in Arabic.

The second phase of the thematic analysis, which is data display, involves generating codes and categories (Greg et al, 2012). Coding is defined by King (2004) as *"a label attached to a section of text to index it as relating to a theme or issue in the data which the researcher has identified as important to his or her interpretation"* (King, 2004, p257). Another definition for codes is by Boyatzis (1998), *"codes are short statements that capture the meaning of the phrase, and can be used to index the data and group together phrases with similar ideas or meaning"*. According to Lincoln & Guba (1985), coding process is *"a method that enables you to organize and group*

similarly coded data into categories or families because they share some characteristic" (Lincoln & Guba, 1985, p. 347).

The coding process could be through an inductive approach where unexpected codes and categories will be identified, such as in grounded theory research. On the other hand, the coding process could be through deductive analysis where the codes and categories are derived from previous theories (Alhojailan, 2012). According to Kent Löfgren (2013): "*You might decide that something is relevant to code because: it is repeated in several places; it surprises you; the interviewee explicitly states that it is important; you have read about something similar in reports, e.g. scientific articles; it reminds you of a theory or a concept*". This study adopted the deductive coding approach where the codes and categories are derived from previous theories and the reviewed literature that has been discussed in Chapter Two. Reviewing theories and literature resulted in developing the research framework that includes four factors, which have been argued encouraged the industry's development. These four factors are: Higher Education Institutions, Networks, Government and Location (see section 2.3). In particular, there are issues that arose within these four factors such as knowledge diffusion, preparing workforce, increasing competitive and productivity. Keywords and expressions that reflected these rising issues were selected as codes. Although this coding process aimed to be deductive, some new codes emerged in an inductive approach.

In this thesis, the data display process is presented in Chapter Five where codes have been extracted from the collected data. Then, related codes were classified into categories. Chapter Five displays these codes and categories in tables where related categories formed one theme. As mentioned earlier, some of the collected data was obtained in Arabic, so the codes also were extracted in Arabic and then translated into

English. In Chapter Five, the related quotations from where the codes have been taken were also translated into English.

The third phase, which is data conclusion, involves generating themes, which are considered the outcome or result of coding (Saldana, 2009). As mentioned above, these themes were formed from related categories that emerged in the second phase.

These themes also tabulated in Chapter Five with the related categories and codes that form it.

Figure 8 below shows the thematic analysis phases.

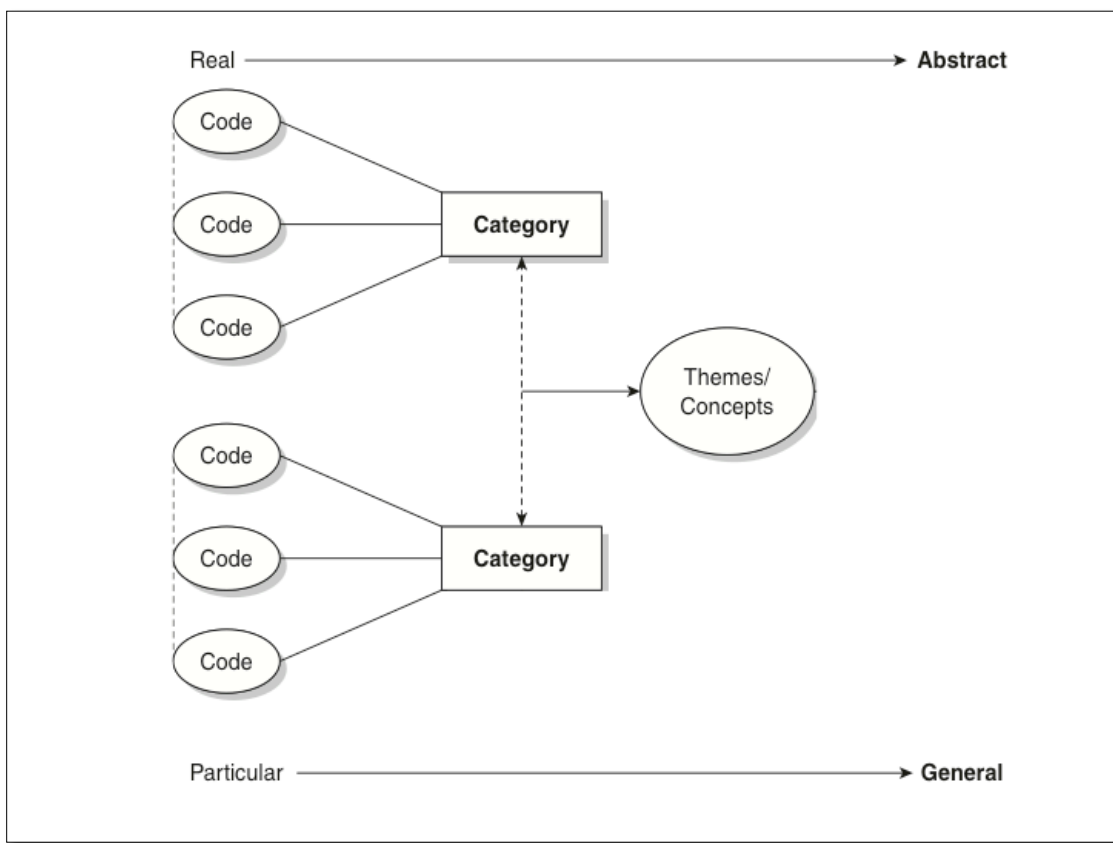


Figure 8: Thematic analysis process (Saldana, 2009)

The thematic analysis could be conducted through a manual process or by using special computer programmes. The manual process involves transcription of all the interview data and the notes taken from the observation in written forms, either using

handwriting or word-processing software such as Microsoft Word, then using manual techniques to select codes, such as a pen to highlight or underline codes and categorise them, listing these codes and categories in a separate sheet. Alternatively, a number of special programmes have been designed for arranging the data for thematic analysis such as ATLAS.ti, MAXqda and N-Vivo. These programmes enable the researcher to organise and structure data in different forms such as written material, images, audio recordings and video footage (Jenner, 2004). In this thesis, the data has been analysed using manual techniques because the number of interviews conducted for different factors is manageable through the use of a manual method. The collected data was transcribed by hand. Following that, the data was read carefully several times in order for the researchers to become familiar with its content. Codes were then extracted using highlighter pens, the extracted codes were listed on a separate sheet, with related codes highlighted using one colour and labeling them as one category. Following that process, the emergent categories were then listed in a separate sheet before related categories were combined into one theme. These codes, categories and themes are tabulated in Chapter Five.

3.7 Summary

This chapter explained the research strategy and the methodological actions employed in the empirical study. It began by describing the research philosophy. In light of the main schools of thought, the research approach used throughout this study was positioned as a broadly interpretive case study. A description of the qualitative research was then presented to identify the justification for the choices of methodology. The adoption of a case study approach was discussed with each data source explained. Finally, the analysis technique was described to highlight how it was employed in this study.

4 Industry Analysis

The aim of this chapter is to present a comprehensive picture of the animation industry in Saudi Arabia and the multiple case study countries. The multiple case study countries are the United Arab Emirates, Egypt, and the UK, with the Emirates representing an emerging Growth stage industry, Egypt representing an established Growth industry and the UK representing a Mature industry. Further information about the rationale for selecting these particular countries will be presented later. The chapter will be divided into five main sections: the four first sections will analyse each country separately, while the fifth section will discuss the findings from the previous four sections as a whole. For each country, the chapter will offer an industry analysis that covers industry structure, market divisions, value structure and value chain, clustering, life cycle, and industry organisations. In addition, for each country, the chapter will present a historical overview covering the significant changes in animation history.

4.1 The Animation Industry in Saudi Arabia

As this study is mainly concerned with the animation industry in Saudi Arabia, it is important to examine Saudi Arabia itself to provide readers with a background to this work. Saudi Arabia, also known as the Kingdom of Saudi Arabia, is located in the south-western part of the Asian continent (Figure 9). More specifically, it is situated in the Arabian Peninsula, where it occupies around 2,240,000 square kilometres of land. Long (1997) provided a holistic description of Saudi Arabia:

“Saudi Arabia is a country of startling contrast- a huge land mass and small population; a barren desert terrain situated over great oil wealth; a traditional Islamic society undergoing rapid modernisation; a closed society that is often in news... the Saudis are a deeply religious, traditionally conservative, proud people who have been forced to make the transition from pre-industrial to the modern age in less than two generations.... Saudi society is thoroughly Islamic and oriented to the extended family; bloodlines are ultimately more important than oil wealth” (p. 1).



Figure 9: Saudi Arabia location map

Saudi Arabia is a member of the Gulf Cooperation Council (GCC), which is a political and economic alliance of six Arab countries around the Arabian Gulf. In addition to Saudi Arabia, it also includes Kuwait, the United Arab Emirates, Bahrain, Qatar, and Oman (Encyclopaedia Britannica). The GCC countries have witnessed rapid growth as regional powers with global reach, and they have some of the most rapidly developing economies in the world (Al-Darwish, 2015). The GCC countries’ economies are mainly based on oil, and Saudi Arabia has the largest reserves of

petroleum (Al-Darwish, 2015; Khorsheed, 2015). Therefore, the creative industries in Saudi Arabia and the GCC remain less developed (The Attention Company, 2015). However, Saudi economic development policy has changed since the 2000s, and it now seeks to achieve economic diversity by shifting towards a knowledge based economy to reduce dependency on petroleum (Al-Darwish, 2015; Khorsheed, 2015). This policy involves launching a number of projects, and four economic cities have been established in Saudi Arabia to achieve this. One of these is KEC, the Knowledge Economic City in Maddinah city, which will be completed in 2020. The KEC aims to serve the Saudi knowledge industries and to attract and develop relevant talent (KEC, 2015). Moreover, Saudi Arabia seeks to develop its human resources, and so far, this has involved increasing the number of universities across all regions from 20 universities in 2005 to 33 universities in 2012 (KACST, 2015). In addition, King Abdullah scholarship program was established in 2005, to sponsor Saudi students to study abroad and benefit from studying at advanced international universities (Taylor & Albasri, 2014). Furthermore, the shift towards a knowledge economy has led to improvements in the communication and technological sectors in Saudi Arabia, to encourage high tech industries. During this period, the Saudi Arabian General Investment Authority has encouraged international and private investment in order to achieve economic diversity (KACST, 2015). This has also included investment in media ventures. Accordingly, a variety of private television channels have been established to broadcast to Saudi audiences (Guaaybess, 2013). The number of private television channels has increased rapidly: in the 1990s, there were only three Saudi private channels; however, in 2014, according to Omar M. Abubakr, the manager of the license department in the General Commission for Audiovisual Media, there were 86 private channels, including 5 television channels specifically directed to children.

The number of firms registered in the media industry in Saudi Arabia is now at least 343, and the number of employees in motion picture and television program production has also increased slightly: in 2010, there were 930 such employees, while in 2013, the number reached 1,035 (Saudi Central Department of Statistic and Information, 2015).

Animation content such as animated advertisements, animated channel identities, and animated films is a basic component of any television channel (Yoon & Malecki, 2010). Where Saudi content does exist, it is generally outsourced. In an interview undertaken in 2012, the manager of Ajyal channel³, a Saudi television channel for children, stated that most of the animation content shown on Ajyal channel is imported. Similarly, private Saudi television channels depend heavily on imported and outsourced animation production. Further discussion of the causes of this reliance on imported and outsourced animation will be presented in the following section.

4.1.1 Industry Structure

As discussed in Chapter Two (see section 2.1.2.2.1), industry structure is influenced by the number of firms that compete in a given industry (Shughart & William, 2008). In turn, the number and size of firms that compete in the market depend on the entry barriers: thus, if there are high entry barriers, only a few firms will succeed in entering this market (Porter, 1980). There are very high barriers to be faced when entering the animation industry in Saudi Arabia, which will be discussed in more detail later in this subsection. These high entry barriers shape the Saudi animation industry, as there

³ A Saudi television channel for children established in 2009 under the administration of the General Commission for Audiovisual Media, under the umbrella of the Ministry of Cultural and Information

only a few firms can manage to enter the industry. However, there are also a number of television production firms, whose main activities concern television drama, but which have produced animation by using outsourcing to countries such as Egypt, Syria, Jordan, and India. Statistical data on the actual number of animation studios in Saudi Arabia is not available; the available data reflects the number of firms within the motion picture industry in general, which includes media production companies that produce TV drama series and programmes. According to the Saudi Central Department of Statistics and Information, the number of firms in the motion picture industry was 187 in 2014 (Saudi Central Department of Statistics and Information, 2014). However, by tracing Saudi animation films and series that are broadcast on Saudi public and private television channels, it is clear that there are only five animation studios that specialize in producing animation series and films that get shown on these channels. These studios are OKtoons, Khalid al Dakheel Cartoon Production, Myrkott, Assattier and Barajoun entertainment. Additionally, a number of advertisement agencies produce advertisements using animation techniques.

To identify the barriers that constrain the Saudi animation industry development, the researcher sought to triangulate the data sources, for greater research validity. This involved obtaining information from different perspectives, as suggested by Patton (1999). Thus, this study compared the data gathered from different industry stakeholders including interviews with studio managers, TV channels managers and higher education course leaders, as well as other sources such as institutional websites. According to interviews with Ossamah Khalifah, a pioneering Saudi animation producer (2012) and the owner of OKtoons animation studio, there are high barriers for entrepreneurs entering the market. One of the entry barriers is capital

requirement, because establishing a business in animation requires a large budget to cover initial outlays on professional equipment such as advanced software and hardware. Furthermore, Khalifah pointed out that hiring a qualified workforce is one of the main aspects that increases the capital requirements. Due to the absence of skills providers in Saudi Arabia offering animation courses, he was forced to set up a production studio in Turkey, where there is a skilled workforce already available. This makes managing the business more challenging because it requires additional travelling, even though he makes maximum use of advanced technology to facilitate communication. To triangulate this data regarding the absence of workforce, reviewing the official website of universities in Saudi Arabia was conducted. It was found that only one university, Effat University in Jeddah, offers deep specialisation in animation, with an established animation track within its visual and digital production course since 2013. However, there are nine universities that offer related course such as graphic design and multimedia design (see Table 3). Additionally, Khalifah believes that one of the reasons that capital requirements are a major barrier to new participants entering the animation industry is the absence of government and private investment in animation production. Thus, any entrepreneurs must incur all the costs alone. K.A, another pioneering Saudi animation filmmaker, agrees with Khalifah that there is an absence of government and private support and investment. An interview with K.A (2012) showed that, although that he has won regional awards and international online awards for his short animation films, he originally faced challenges from the Saudi community that constrained him from establishing an enterprise in animation due to the high risk of failure. Similarly, Abdulaziz Al-Muzaini, the co-founder of Myrkott Animation Studio, also blamed the shortage of investment in local production for difficulties in entering the animation business,

despite the reputation that his studio has since achieved. To discover the rationale behind this absence of investment in Saudi animation, gathering data from the opposite perspective was required. Thus, interviews with a number of Saudi television channel managers were conducted as they are the buyers. According to Sanna Mhumenah, the manager of Ajyal channel, this absence of investment reflects the cost disadvantages of Saudi production, which is another entry barrier that the Saudi animation industry faces. This disadvantage is combined with the issue that Saudi productions tend to be poor quality compared to the imported international productions that the Saudi television channels broadcast. She pointed out that it is better value to pay more for an animation production produced by international studios, particularly American studios such as Warner Bros, Hanna Barbera, and Disney, because their productions are always excellent quality due to experience. Khalid Albeit, the manager of the Saudi channel, argued that imported animation has a cost advantage because of its high quality in terms of the drawings and movement of the animation content; the stories and scenarios of imported animation are made by professionals in children entertainment, and the sound effects in imported animation are more appropriate than those in local productions. Similarly, Ayman Aljubaly the manager of the Simsim channel⁴ claimed that local production has cost disadvantages because of its poor quality in terms of content and story. He pointed out that it is more efficient to broadcast imported animation as the price of imported animation, even adding the cost of dubbing it into Arabic, is much cheaper than buying local production. Moreover, Aljubaly stated that even outsourcing is more beneficial than buying from local producers, as outsource providers produce higher quality work than local creators. Thus, the majority of animation content on Saudi television channels,

⁴ Simsim channel is a Saudi private channel that directed to children

both private and public, is imported from international studios or outsourced to neighbouring countries such as Egypt, Syria, or Jordan, or Asian countries such as Malaysia and India.

A further entry barrier for potential Saudi animation industry entrants is the absence of distribution channels. The animation industry in the country has very limited distribution channels, and these mainly depend on direct personal contact; here, the creator, either the animation studio or a producer, presents a pitch of the animation project to a sponsor or line producer such as a television channel or media production firm in order to persuade them to invest in this project. In some cases, the creator could be a writer who has a story that could be adapted and developed as an animation film or television series. This process usually takes place in a media market place, where different media maker firms gather to market their projects to buyers. However, Khalifah pointed out that in Saudi Arabia, there is an absence of such distribution channels. Consequently, it is difficult for animation studios to reach key buyers, storywriters, or even partners who could help to defray the high budget costs. In addition, it is very difficult for animation entrants to contact these buyers directly due to the weak infrastructure in Saudi Arabia, which means that there is a lack of, for example, official web sites with active contact details. Similarly, Al-Muzaini argued that there is an absence of distribution channel in Saudi Arabia for the animation industry; in particular, he faced difficulties in obtaining a license to establish his Studio. This author has certainly found that even collecting data for this research was challenging due to difficulties reaching the television managers for interviews in the absence of formal contact information. Thus, interviewing these individuals required seeking personal contacts by networking with peers already working in the television

industry.

In light of this information, the barriers creating obstacles to new entrants to the animation industry market in Saudi Arabia become clear.

4.1.2 Industry Life Cycle of The Animation Industry in Saudi Arabia

As discussed previously in Chapter Two, an industry life cycle has several different stages, starting with the Introduction stage, developing through a Growth stage, then reaching a Mature stage before, in some cases, falling into a Decline stage. Based on the collected data about the Saudi animation industry, it can be stated that the industry is definitely still in its Introduction stage. According to Porter (1980), the Introduction stage of an industry life cycle has specific features that include poor product quality, few firms competing within the market, and high risk. These features certainly apply to the current Saudi animation industry.

The quality of Saudi animation production is generally poor compared with that from Mature industries such as those in the USA and the UK. There are several different signifiers that show the quality level of animation products, such as the scale of demand: for example, Disney animation is in demand in many different countries. Winning an international award is another sign of high quality in animation production: Aardman, the British animation studio, has won several different international awards for its animation productions. In an interview with the manager of Ajyal channel (2012), she pointed out that the poor quality of local production is one of the reasons that makes demand for it lower than the demand for imported work such as American and Japanese animation. There are several different reasons for the

poor quality of Saudi animation. In a previous study conducted by Muthalib (2007), the poor quality of Malaysian animation was seen to be due to the shortage of knowledge that higher education institutions can provide students with. Similarly, in Saudi Arabia, an absence of higher education institutions that offer full time animation courses affects quality. Higher education institutions started to offer qualifications relating to the animation industry only in the late 2000s, and according to data collected from the official web sites for all Saudi Universities, there are only nine universities that offer courses that cover aspects related to the animation industry such as graphic design, multimedia design, digital design, visual communication design and 3D design. Only one university, Effat University in Jeddah, offers deep specialisation in animation, with an established animation track within its visual and digital production course since 2013.

University	Location	Subject
Dar Al Hekma	Jeddah	Visual communication: Motion graphic track
Effat University	Jeddah	Visual & digital production: Animation track, video production track, screen writing track, and interactive media track
Princess Nourah University	Riyadh	Graphic Design and Digital Media
Al-Yamamah University	Riyadh	Drawing and multimedia
Dar Al Uloom University	Riyadh	Digital design

University of Business & Technology	Jeddah	Advertising creative design: Media production
King Abdul-Aziz University	Jeddah	Drawing and arts: animation module
Taif University	Taif	Electronic drawing
Tybah University	Maddinah	Child Media: Graphic and animation module

Table 3: Saudi higher education institutions that offer creative course related to animation (by Ohud Alharbi, 2016)

Table 3, it is evident that this absence of skills providers is an important obstacle to the creation and diffusion of knowledge in the animation industry in Saudi Arabia. As knowledge diffusion is one of the key drivers for industry evolution (Grant, 2010), this shortage of knowledge in the Saudi animation industry affects its future development. According to an interview with Mullah Alamody (2012), who teaches an animation module within the Islamic Art course at King Abdul-Aziz University at Jeddah city in Saudi Arabia, the module covers only very basic knowledge related to animation such as character design and simple graphic motion. An interview with Huda Alnbhan (2012), who teaches digital media and interactive design within the department of Graphic and Media Design in Princess Nourah University at Riyadh, indicates that students there are provided with more advanced knowledge and skills than King Abdul-Aziz University provides, as students are taught how to use computer-based tools to design and create interactive digital media through editing digital images, sounds, video, text, and motion graphics. Moreover, students are taught how to use different animation techniques, including 2D and 3D, as well as the use of digital tools such as Flash, Photoshop and Dreamweaver. However, the main

focus of this course is not animation, as it focuses more on creative design through the application of digital media. Similarly, the electronic drawing programme at Taif university, according to Muna Alzhrani who teaches modules that cover animation skills within the electronic drawing programme (2015), was established in 2011 and covers 2D and 3D CGI animation skills. However, the substantial number of students who are enrolled in this programme makes it difficult for learning to take place, as there is insufficient equipment for all of the students.

Another reason for the poor quality of Saudi animation is the shortage of investment in animation projects from private and government bodies. Animation films and series production require large budgets, and these are normally funded by the producer as well as other bodies including line producers, commercial sponsors, or commissioners (Skillset, 2011). Khalifah (2012) pointed out that all the animation films that he produced were self-funded, and that he has not received any financial support from private or government bodies.

As discussed in the previous section, the high capital investment that animation requires is a major barrier that prevents firms from entering this market, alongside cost disadvantages, lack of entrepreneurial knowledge, and absence of distribution channels. Consequently, there are only few firms competing in the Saudi animation market, and this low number of firms is one of the indicators that the Saudi animation industry is still in its Introduction stage.

Another feature of the Introduction stage that applies to the Saudi animation industry is that it is high risk. This high level of risk has several causes. According to

interviews with Saudi animation studios' founders, this high risk is due to expensive capital requirements for such a business, including budgets to cover professional equipment such as software and hardware, and to hire a qualified workforce. A further reason for high risk is uncertainty. According to these interviews, Saudi animation studios founders faced uncertainty before entering the industry, because it is considered an emerging field, and it is not common in Saudi Arabia. This is because of a social perspective that believes that animation is for children only. However, this social perspective has changed in the last ten years as some media production companies have produced a number of family animation sitcoms based on comedy-drama television series, such as Menahy Diary⁵ in 2006 (Figure 10) and Cartoons Tash⁶ in 2007 (Figure 11), which were broadcast on the MBC channel⁷.



Figure 10: Menahy Diary (aawsat.com, 2007)

⁵ Menahy Diary is animation series for family based on popular Saudi comedy television series named Menahy.

⁶ Cartoons Tash is an animation series based on the popular Saudi comedy drama Tash ma Tash

⁷ MBC, Middle East Broadcasting Center was the first private free to air satellite channel in Arab World in 1991. It is owned by a Saudi businessman.



Figure 11: Cartoon Tash (alriyadh.com, 2007)

Nevertheless, working in the animation industry still receives little respect within the Saudi community, as people believe it is not a secure and profitable career. Thus, parents do not encourage their children to enter this emerging market, and most of the Saudi animation entrepreneurs, such as Abdulaziz Al-Muzaini, Malik Nejer, Farah Arif and Emad Albhara, started presenting their own animation on their YouTube channels. These experimental animations on YouTube received a great deal of attention from the younger generation, and the number of viewers was enormous, with the producers receiving many comments and a great deal of encouragement. This response has encouraged several young talents to enter this industry.

4.1.3 Clustering

In Saudi Arabia, the media industry in general is concentrated in the major cities Riyadh, which is the capital city, and Jeddah, which is a major economic city.⁸ Thus, the animation industry is also centred in these two cities even though only a few firms specialise in animation production. This may be partially because creative agencies that produce advertisements that include animation content also cluster in these two

⁸ No statistical data are available from an official website to show the demographic location for motion picture firms, so this research involved reviewing a number of official website for media production companies in Saudi Arabia to identify where they clustered.

cities, but there are a range of aspects that may encourage this agglomeration. These two cities are the home of most media industry firms including press, radio, and television companies. These firms include pre-production, production and post-production services, some of whose services are required by animation firms. Moreover, Saudi television has major studios in both cities, and broadcasts most of its television programs from these areas. In addition, in Riyadh, the King Abdullah Initiative for Arabic Contents launched an Excellent Centre for multimedia in 2010 in order to create a talent pool for the animation and game industry (KACST, 2010). However, this did not work as planned; it graduated only one generation of students after an intensive training program of two years before being closed (Alhargan, 2013). Although the animation training program in the Excellent Centre graduated only one generation, there is no doubt that this contributed to seeding this industry in Riyadh. According to interviews with a number of the talents⁹ that were previously enrolled in that programme, most have started their own businesses as freelancers, co-founded creative agencies such as advertising agencies, or have been recruited to teach creative subjects related to animation such as multimedia and motion graphics in local higher education institutions. Some continued their postgraduate studies in animation outside the country in more advanced universities located in European and North America countries to improve their skills and knowledge of animation. Riyadh and Jeddah also host most of the higher education institutions that offer courses on subjects related to the animation industry, such as Princess Nourah University, Al-Yamamah University, Dar Al Uloom University in Riyadh and King Abdul-Aziz University, Dar Al Hekma College, University of Business & Technology, and Effat University in Jeddah.

⁹ Huda Alnbhan has been recruited to teach multimedia in Princess Nourah University; Nouf has continued her postgraduate work in animation courses in the UAE, and Alla Mctoom set up his creative agency, Akwan.

4.1.4 Value Chain and Value Structure

The value chains for the animation studios in Saudi Arabia are varied. Some have adopted vertical integration, where the whole process is completed within the same studio, while some of them have adopted horizontal outsourced production that makes use of skills available in animation studios outside of Saudi Arabia. The value structure for the animation industry in Saudi Arabia is also complex, similar to any animation industry value structure. This because an animation could be produced by an animation studio with vertical integration and the capability to develop and create entire animation series, including development, preproduction, production, and post production. For instance, the Masameir series was developed and produced by Myrkott Studio, which is the owner of the intellectual property rights for this series. On the other hand, some Saudi animation productions are owned and pre-developed by media production companies that specialize in television production. For example, the Menahy series was pre-developed by Almalky Media Production, which owns the intellectual property rights for this series. As Almalky Media Production specialises in television comedy drama production, the production and post production for Menahy were outsourced to Emaritoons, an Emirates animation studio. Analysing most Saudi animation productions shows that certain countries are usually used as outsourcing providers, including Egypt, Syria, Jordan, India, Pakistan, Malaysia, and the UAE.

4.1.5 Market Divisions

This section will provide an overview about the market divisions of the animation industry in Saudi Arabia regarding both techniques and functions. In terms of technical market divisions, these will be presented later in this chapter as part of the historical development of the Saudi animation industry (see section 4.1.7). Saudi animation productions that have been outsourced frequently use 3D CGI and cell animation techniques (see section 4.1.8.1). However, Saudi animation production created by local Saudi animation studios are produced using only CGI animation techniques, with 2D work being much more common than 3D (see section 4.1.8.2). The empirical work this research is based on has also demonstrated an absence of stop motion techniques in Saudi animation both in outsourced production and in house.

In terms of functional divisions, most Saudi animation productions include animated comedy series for families: OKtoons Studio is the only studio that produces animated series for children. Most of its productions are animated feature films that seek to educate and inform children, adaptations of a number of stories from Islamic history and heritage (Khalifah, 2012). Several animation studios also produce short informative animated films, and the outsourced animation has variety of functional divisions, including animated series for children and adults as well as videos for children's songs.

4.1.6 Organisations supporting the Saudi Animation Industry

This section presents the Saudi organisations that this research has identified as supporting the art, creative, and cultural sectors in Saudi Arabia. Unfortunately, none of these organisations seem to pay much attention to the animation industry.

4.1.6.1 *Saudi Cartoon and Animation Society*

This is a non-profit organisation that was established in 2009 that aims to support the cartoon and animation sector in Saudi Arabia through events and activities such as workshops and seminars. However, it mainly focuses on cartoons; it has 13 members, and all of them are cartoonists. Reviewing the social media accounts for this organisation on Facebook and Twitter shows an absence of activities that target animation. Interviews with Saudi animation film makers (2012) showed that they did not even know that such an organisation existed. According to Al Muzaini (2015), who is a member of this society because he is a cartoonist alongside managing his animation studio, this society would need support from different sectors to be able to launch events and activities to support the animation industry.

4.1.6.2 *The Saudi Society for Culture and Arts*

This organisation was established in 1973 in Riyadh, the capital city. It then expanded to 16 branches in different cities across Saudi Arabia. This organisation aims to support artists and talents in a range of cultural arts such as poets, painters, and musicians. However, there is an absence of activities relating to the animation industry.

4.1.7 *Historical development of Saudi Animation*

It is difficult to address the historical development of the animation industry in the Arab World in general because of the huge gap in academic literature resources in this

field (Alrimawi, 2014). Thus, this research seeks to cover the historical development of Saudi animation based on data collected from interviews as well as analysing written and visual documents. In fact, Saudi has made use of animation since the establishment of Saudi television. In 1962, King Faisal, who was at that time the prime minister of Saudi Arabia, delivered a ministerial statement to announce that the government of Saudi Arabia planned to introduce Saudi television within the ethical framework of Saudi society. In the year following that announcement, the Council of Ministers approved the establishment of the first Saudi television channel (Ministry of Culture & Information, 2012). By 1965, the Arabic Saudi Channel had started broadcasting for the first time, in black and white (Boyd & Najai, 1984). At that time, Saudi television aired famous American animation cartoons such as *Betty Boop* from the Fleischer studio, and *The Flintstones* from the Hanna Barbara animation studio (Abualyazeid, 2010). In 1975, colour Saudi television started broadcasting (Ministry of Culture & Information, 2012), and at that time it continued presenting outsourced animation cartoons from American studios. In 1979, *Sindbad Adventure*, the first animation from a Japanese studio, was presented with dubbing in Arabic by Nicolas Abu Samah, a Lebanese dubbing company that was one of the pioneers of animation dubbing in the Arab world (Maluf, 2003; Abualyazeid, 2010).

4.1.8 Dubbing Animation Stage

Importing Arabic dubbed animation has become common for Saudi channels since the first showing of *Sindbad Adventure*. This was followed by many Japanese animation series, which were dubbed by Nicolas Abu Samah, including *Grendizir* and *Zenah Wa Nahul* (Maluf, 2003). In 1979, Saudi Arabia as a member of the Gulf Cooperation

Council Program Production Institution¹⁰ (GCCJPPI), participated in dubbing several animations into Arabic. The first animation that was dubbed by GCCJPPI was the popular American children's series *Sesame Street*, named in the Arabic version *Eftah Ya Simsim*, which means open sesame (GCCJPPI, 2012). This children's program had some animated scenes that were outsourced to an Iraqi artist who founded an animation studio in Hungary (Alttaher, 2010). After the success of *Eftah Ya Simsim*, GCCJPPI started dubbing Japanese animation series that were appropriate for display in Gulf Arabian communities.

4.1.8.1 Commission and Coproduction Animation Stage

In 1989, Osame Khalifah, the first Saudi entrepreneur in the animation industry, produced an animated feature film for children named "*Jazirat Alnoor*" (Figure 12).



Figure 12: The first Saudi animation feature film by Ossame Khalifah (OKtoons, 2013)

¹⁰ The Gulf Cooperation Council Joint Program Production Institution is a regional Gulf Arabic organisation founded in 1976. Its headquarters are located in Kuwait. The original members included Iraq; Yemen later entered and Iraq left. The organisation aims to support the development of TV production in the Gulf area.

The story of *Jazirat Alnoor* was taken from the popular Arabic philosophical novel written by Ibn Tufail in the 12th century. Khalifah commissioned this film from an animation studio in Turkey and it took about two years to be completed. After the success of his first film, Khalifah established Alla Production in 1992, with head offices located in Jeddah, Saudi Arabia and a creative studio in Istanbul, Turkey. This division was due to the lack of a qualified Saudi workforce in the animation industry. Later, in 2008, the name of the company was changed to OKtoons. Khalifa has produced fourteen animation films since 1989, most of them inspired by his Islamic and Arabic heritage, and some of the company's productions have been dubbed into different languages including English, Turkish, and Ukrainian.

In 1992, Saudi Arabia, as a part of GCCJPPI, co-produced an animated children's series *Zatoor* (Figure 13) (GCCJPPI, 2012). The pre-production of this animation series (the character design and story boarding) was done by GCCJPPI, while the production and post production was done in the Dana animation studio in Hungary, which is owned by an Iraqi director, again due to the lack of animation industry skills in GCC countries. *Zatoor* is based on folklore stories from the Arabian Gulf region as shown through the daily life of a farmer with his daughter and her funny donkey (GCCJPPI, 2012).



Figure 13: Zatoor animation series (GCCJPI, 2012)

Shadid & Tamam (Figure 14) was an animation feature series that was produced by Saudi producer Abdel Aziz Al Oraify. The first season was produced in 2002 and the second season in 2003. The pre-production of this animated film was done in Saudi Arabia by Animation Production while the production process was commissioned to an animation studio in India due to the continuing lack of availability of qualified Saudi workers. The main characters of this animation cartoon are a jerboa and a lizard, which are popular animals in the Saudi Arabian desert. This animation received a great deal of attention from the Saudi community because it reflected the Saudi environment and culture as well as having a sense of humour (Althoeny, 2005). *Shadid & Tamam* won a silver award in the animation category in the 9th Cairo Festival for Radio and Television.



Figure 14: Shadid & Tamam by Abdel Aziz Al Oraify, 2003

In 2004, another animation film coproduced by GCCJPPI and the Dana animation studio in Hungary was released, *Ibnulgabah*, which features the same story as *Jazirat Alnoor*, taken from the Arabic philosophical novel written by Ibn Tufail (GCCJPPI, 2012). This animation film won the Cairo Child Cinema Festival in 2006 (Alnimer, 2006).

4.1.8.2 The Creation of Saudi Animators

After the successful production of animation that reflected Saudi identity and culture, Saudi talents began to enter the animation industry as animators. These talents benefited from working as freelancers for advertising agencies or other private and government body to improve their knowledge and skills of creative production, such as using designing and drawing software. In 2005, the Saudi talent Khalid Aldakheel, who had worked as designer and animator in an advertisement agency, produced his own 2D animation film named *Sida* (Figure 15). Although Aldakheel was self-taught, his animation short film won an award in The Emirates Film Competition. This film also participated in many film festivals such as the Jordan Short Film Festival and the Jeddah Film Festival.



Figure 15: Sida by Khalid Aldakheel (Kdcartoon. Com, 2012)

Malik Nejer, another Saudi talent with a good reputation in Saudi society, worked as web designer and animator in an advertisement agency. In 2009, Nejer was inspired by the natural disaster faced by Jeddah city in November 2009 to produce his first animation film on YouTube named *The Real Reason Behind Jeddah Disaster*. In 2010, this short film attracted the attention of MBC1, the private Saudi channel, which wanted to use Nejer's skills to create animation scene for the comedy sitcom program *Komedo*, which had a reputation among the Saudi community. In 2011, Malik Nejer and Faisal Al Amer, a Saudi writer, created *Masameir*, (Figure 16) an animation sitcom on their YouTube channel that directed to the Saudi family. All of the processes of production, including designing characters, drawing, and animation, were done by Nejer. The number of *Masameir* viewers on YouTube reached more than one million, and this success, Nejer and Al Amer co-founded Lumink animation studio in Riyadh, where they extended their team by hiring a number of Saudi talents and continued producing *Masameir* on YouTube. In 2013, *Masameir* was broadcast on the Saudi television channel and YouTube simultaneously, and the number of viewers reached 75 million. In 2015, Nejer and Al Amer co-founded a new animation studio with Abdulaziz Al-Muzaini and Adnan Obathani, Myrkott Animation Studio, where they produced another season of *Masameir* and a number of animation sitcoms

that directed to the Saudi family, including *Uloom Finjal* (Figure 17) and *Sanpar* (Myrkott, 2016).

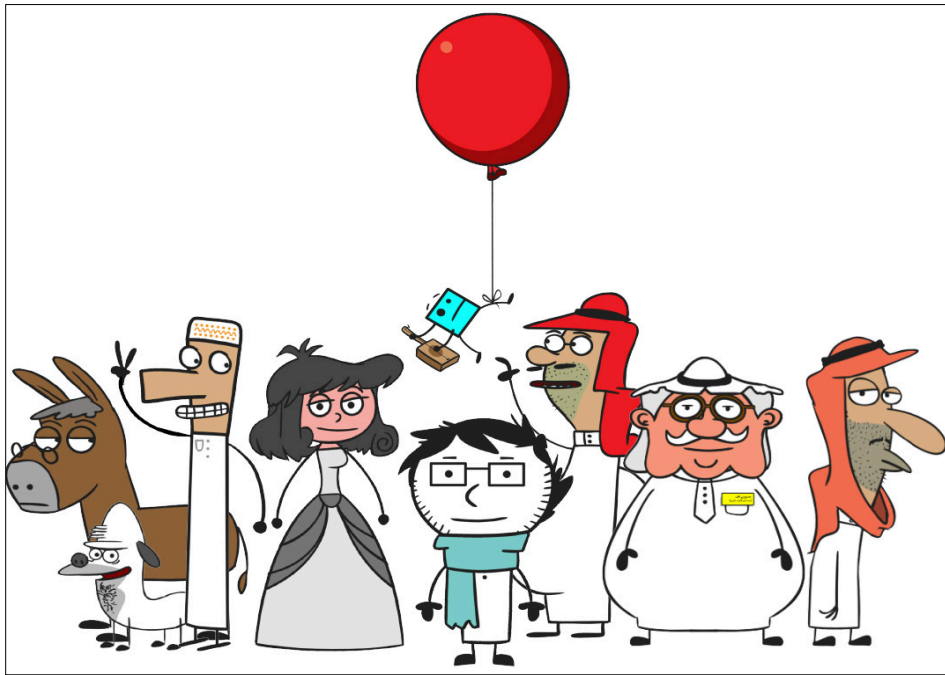


Figure 16: Masameer by Myrkott 2012(Myrkott, 2015)



Figure 17: Uloom finjal by Myrkoot, 2014 (Myrkott, 2015)

Abdulaziz Al-Muzaini, the co-founder of Myrkott Animation Studio, is a cartoonist who works at Alwatan, a Saudi Newspaper. He started to develop a short animation video via his YouTube channel before establishing Kish Malk Studio with Njer in 2010, prior to the establishment of Myrkot.

In 2010, the King Abdullah Initiative for Digital Content ran a training program with the Japanese multimedia company Index in the capital city, Riyadh (KACST, 2010). The training program used professional Japanese artists to train Saudi talent of both genders in the professional skills required for animation art. This training program ran for two years and, in the end, the Saudi talents who had enrolled on that two-year course produced a series of animation cartoons named *Little Inventors* (Figure 18). The series included six episodes, and all of the production processes, from storyboards to directing the series, were done by Saudi talent.



Figure 18: Little Inventors, 2011 (Alwatan, 2012)

In 2014, Farah Arif, a talented Saudi female, drew, animated, and directed *Abtal Awal* (Figure 19), which means ‘The previous heroes’. This was an animation series produced by UTURN, a Saudi media production company. This series featured several of the most popular animation characters broadcast on Saudi channels in the 1980s and ’90s. Arif won the Emirates films competition in 2007, when she produced and directed her first animation film at the age of 14, and she has reputation for creativity. She was commissioned by her secondary school and then by the university

where she was studying for her bachelor's degree to create several short animation video projects, and this experience and the reputation she gained assisted her work as a freelancer, during which she improved her animation skills. After her graduation, Myrkott Animation Studio recruited her to work with the creative team.



Figure 19: *Abtal Awal* by Farah Arif (2014)

In 2015, Nijood Alharigy, another talented Saudi female, created a series of short simple animations using cut-out techniques. The *Bakheeta* series (Figure 20) discussed typical daily life for Saudi ladies in comedy style and was broadcast on her own YouTube channel. This series attracted a large audience, and one year after its launch, UTURN media production offered her a contract as a producer for the show, improving its production.



Figure 20: *Bakheeta* (Bakheeta, 2016)

4.2 The Animation Industry in The United Arab Emirates

The United Arab Emirates, often known as UAE, is one of the Arabian Gulf Cooperation Countries (GCC) and is located in the eastern part of the Arabian Peninsula (Emirates, 2015). In the last thirty years, the Emirates has changed from a tribal culture, dependent on agriculture and fishing, to one of the leading entrepreneurial countries in the Middle East and North Africa region, by developing a competitive infrastructure (The Private Office, 2015). In fact, the UAE has succeeded in establishing an excellent reputation in the international market for media and communications (Al-Ghufli, 2010). In particular, the UAE has developed its moving image industry, including films, games, and the animation industry, significantly, to the extent that it attracts global strategic partners to invest in this sector and take advantage of this emerging market (Emirates, 24/7/2010).

As mentioned previously in the Methodology Chapter, the countries in the multiple case study were selected to be studied based on a theory driver, as suggested by Yin (2009). Thus, these particular countries were chosen based on the concept of industry life cycle; thus, the Emirates' case study represents an industry that has just begun its Growth stage. Another reason for choosing the Emirates as one of the multiple case study countries is that it has a similar context to Saudi Arabia, as both countries are members of GCC, share the same heritage, culture, and languages, and have similar economic states. However, the Emirates has succeeded in progressing its moving image industry, including film, animation, and game industries, from the Introduction to Growth stage in a short period of time. Moreover, it has become a destination for

both talents and stakeholders from the Middle East and North Africa region and globally (United Nations, 2008).

The animation industry in the United Arab of Emirates will be analysed in this section, and the industry's structure and size will be highlighted. After that, an analysis of the Emirates animation industry life cycle will be undertaken, and then a section on clustering will examine the animation industry in Abu Dhabi, the capital city, and Dubai, where most of the animation industry is concentrated in this country. A brief list of key organisations that support the animation industry will also be presented before the historical development of the animation industry in the Emirates is laid out to emphasise the moments of significant change and progress.

4.2.1 Industry Structure and Size

The creative industry environment in the Emirates is considered to be one of the best among Arab countries (UK Trade & Investment, 2013). In particular, the UAE is considered to be a hub for the media industry in the Middle East and North African region (Al-Ghufli, 2010). It has succeeded in taking over this reputation from Egypt and the Lebanon, which were both in turn previously considered to be the “Hollywood of the East” (Alrimawi, 2014). According to the Animation Industry Database, there are 23 animation companies in the UAE (AIDB, 2014). However, several studios have not been counted in this list, and due to an absence of data regarding animation firms in the Emirates, it is quite difficult to obtain accurate information about firms' size. However, from reviewing a number of animation studios' LinkedIn accounts, it is clear that most of these studios can be classified as micro (less than 10 persons) or small (between 10 and 50 persons) companies. There

are a few medium size companies with 50 to 250 persons, while a minority of studios are large firms with more than 250 persons. There is also recognizable domination by a few firms who entered the market in the industry's Introduction stage. This has resulted in the market becoming structured as an oligopoly. In an oligopolistic market, a small number of firms dominate the market as a result of high barriers to entry (McCarthy & Perreault, 2005).

4.2.2 Industry Life Cycle of the Animation Industry in the UAE

Although the animation industry in the Emirates was only established in the 2000s, it has already succeeded in moving from the Introduction stage to a Growth stage. However, this study suggests imposing a differentiation between Egypt and the UAE, despite both having animation industries in the Growth stage, by classifying the Egyptian industry as being in Established Growth, due to its having reached its Growth stage nearly two decades prior to the Emirates' successful ascent to this level. The Emirates animation industry can then be classified as being in an Emerging Growth stage due to its recent emergence in the 2010s. To identify the barriers that constrain the Emirates animation industry development, the researcher sought to triangulate the data sources, for greater research validity. This involved obtaining information from different perspectives, as suggested by Patton (1999). Thus, this study compared the data gathered from different sources such as data from interview and data from official websites.

As mentioned at the beginning of this chapter, this study uses Porter's (1980) classification for the differing characteristics of industry life cycle stages as a lens to determine the current stage for the multiple case study countries. Analysing the animation industry in Emirates shows several indicators that suggest that the

appellation of Growth stage applies to the current characteristics shown by the Emirates animation industry. These characteristics include an increased number of entrants, good quality animation, and increased demand for such animation.

In terms of an increase in the number of firms competing in the market, it is clear that this characteristic applies to the animation industry in the Emirates, where there is a noticeable trend of establishing firms within the animation industry featuring local entrepreneurs backed by international investments. According to an interview with Haidar Mohammed (2013), co-founder of Fanar Production, when he started his business in animation production, there were only three competitors (Mohammed, 2013). However, as shown by the animation industry database, in 2014 there were about 23 firms competing in the animation industry (AIDB, 2014), which indicates that the number has increased significantly. Based on the author's analysis of a number of LinkedIn accounts for animation studios based in the Emirates, several studios that originated in different Arab countries such as Syria, Jordan, and Iraq, and some from Asian countries such as India are now based in the UAE. An important aspect that has attracted both local and non-local firms is the establishment of media clusters in Abu Dhabi and Dubai. Many local, regional, and international media broadcasters have established headquarters in these two cities to gain advantages from the opportunities, infrastructure, and distribution channels they offer (Kadragic, 2010). Among these broadcasters are a number of television channels that are directed at children, which depend heavily on animation content, such as Majid, e-Junior, MBC3, ART Teenz, Space Toon, Cartoon Network Arabia, and Nickelodeon Arabia. All of these channels are directed to Arab audiences; with the exception of the two Emirates children's channels, Majid and e-Junior, the other channels are originally

from different Arab countries: MBC3 and ART Teenz are Saudi private channels, while Space Toon is Syrian. Others are international channels that are directed towards the Arab world such as Cartoon Network Arabia, a sister channel of the American Cartoon Network, and Nickelodeon Arabia, which is a sister channel for the American children’s channel Nickelodeon. As these channels are directed to Arab countries, they increase demand for local animation content that represents the region’s cultural and moral perspective (Bendazzi, 2016). The demand on the Emirates’ animation industry is therefore not limited to local broadcasters but features those external broadcasters that have established links with Emirates animation studios. For example, Cartoon Network Arabia, which historically broadcast much of the same animation content as shown on its American channel, but with Arabic dubbing, has started to broadcast *Mansour* an animation series for children produced by Fanar Production, a UAE company (Emaratalyoun, 2014). *Mansour* represents the regional culture and environment of GCC countries from an internal perspective (Figure 21).



Figure 21: Mansour by Fanar Production on Cartoon Network Arabia (screen shot by Ohud Alharbi, 2015)

This increase in demand indicates that the risks that firms face when entering the animation industry can be compensated for, which is another characteristic of the

Growth stage as suggested by Porter (1980). In addition, this increase in demand indicates that the quality of Emirates animation has improved to the extent that the Emirates can succeed in competing with Egypt in terms of providing outsource services for the animation industry in the wider region. This improvement of the quality of animation production is also another indicator of the move by Emirates animation to the Growth stage. Several different aspects have assisted in improving the quality of the local production, including the establishment of media clusters as mentioned in the beginning of this subsection, which have attracted international firms. As a result of networking and collaboration between the local and international firms, knowledge and skills transfer has occurred and local animation firms have benefited from this transfer by improving production. Further discussion of this issue will be presented in more detail with evidence from empirical research in Chapter Five.

Another aspect that has facilitated the animation market in the Emirates developing rapidly is the availability of workforce compared with the period before 2000. The establishment of skills providers after that date has contributed to the availability of a skilled workforce. According to an interview with Haidar Mohammed (2013), it was difficult to find skilled animation workers in the Emirates due to the absence of local animation skills providers before the 2000s. However, by the 2010s the UAE had become a centre for such talent. In 2003, the United Arab Emirates University in Al Ain introduced animation filmmaking as an optional module taught for students within the department of Education Art and the department of Technology. According to an interview with the animation programme leader for Zayed University Rahul Malpure (2013), Zayed University in Dubai was the first higher education institution

in the UAE to provide a full-time animation course, in 2004. In addition, the number of higher education institutions that offer animation and related subjects has generally increased: by the end of the 2000s, further higher education institutions had started to offer full time animation courses. Table 4 shows the currently available higher education institutions that offer animation as a course or part of a course.

Institution	Programme title	Location
Cartoon Network Animation Academy	Animation	Abu Dhabi
Zayed University	Animation programme within the College of Arts and Creative Enterprises	Dubai
United Arab of Emirates University	Animation module within the department of Education Art and the department of Technology	Al Ain
Higher College of Technology	Animation programme	Abu Dhabi
Higher College of Technology	Animation programme	Dubai
Al Khawarizmi International College	Computer Graphic and Animation programme	Abu Dhabi
the University of Wollongong	Computer Science in Multimedia and Game development	Dubai
University of Sharjah	Graphic Design and Multimedia programme	Al Sharjah
American University of Sharjah	Animation module within Multimedia design programme	Al Sharjah
the American University in the Emirates	Digital animation pathway in Since of Design Programme	Dubai

Table 4: Higher education institutions that offer animation and related courses in UAE (by Ohud Alharbi, 2016)

However, compared to a Mature animation industry such as the UK, there is still a shortage of skills providers in the UAE in terms of the number of institutions that offer full-time animation programmes. This explains why the interviewee reveals that producing animation required in some cases outsourcing some of the processes to Asian countries due to the availability of workforce there, as the number of employees at local Emirates studios is quite small for producing series that usually

contain thirty episodes, in which each episode duration is about 15 minutes or less. This fact was also reflected from reviewing a number of animation studios' LinkedIn accounts, which demonstrate that most of local studios is classified as micro where less than 10 persons are working in it, or classified as small firms that have between 10 and 50 persons employees.

Another aspect that has driven the industry life cycle for the Emirates' animation industry is its film festivals and fairs, which assist with knowledge diffusion (Bassett et al, 2002). In the UAE, there is a growing interest in launching networking events that relate to the media industry, including the animation industry, such as the Gulf Film Festival in Abu Dhabi (Gulf Film Festival, 2015) and the Dubai Film Festival, which has a sub category for animation films (DIFF, 2015). Furthermore, the launch of the Big Entertainment Show, which covers the entertainment industry in general, has targeted animation in particular, with a dedicated part of the event titled My Content. As a part of the primary research for this paper, a study visit was made to the My Content event in 2013. A further festival with animation as its main focus is Animate Dubai, which was launched in 2015. This aims to shine a spotlight on talents within the region, enhance the animation market and encourage knowledge exchange between professionals and talent communities (Animate Dubai, 2015). However, this limited festivals and media marketplace indicates that there is a shortage of distribution channels that target animation industry in particular comparing what was found in Mature industry such as the UK, which will be discussed later under the UK section.

4.2.3 Value Chain and Value Structure

In the Emirates, firms within the animation industry adopt different structures of value chain. Some have adopted vertical integration, where they have the capability and potential to enable them to cover all processes of animation including pre-production, production and post-production inside the studio, such as Blink Studio in Abu Dhabi. According to an interview with Nathalie Habib, general manager of Blink Studio (2013), the studio even provides an outsourcing service. Interestingly, this studio co-produces an Arabic version of *Driver Dan the Story Train*, an animation series for children, with 3Line Media, an animation studio from Bristol, UK (Figure 22).



Figure 22: Driver Dan The Story Train

Some UAE animation studios adopt horizontal integration, where the studio outsources parts of the process such as production or post-production processes to another local studio or foreign studio. For example, Fanar Production animation studio, according to data from an interview with Haidar (2013), Fanar Production's co-founder, outsources the animation and rendering processes to an Indian studio due to their low workforce costs. Furthermore, some studios that have even fewer internal capabilities; these generally only develop the storyboards and design the characters,

outsourcing the full production and post-production processes; an example of this is Busy Bee Media (Jundi, 2014).

In terms of the value structure of the animation industry in the UAE, some firms own the rights for all production content including scripts and characters and do their own pre-production, production and post-production processes; Fnar Production, which produces *Shaabiyat Al cartoon* (Figure 23), a very popular family animation series in the Emirates that has aired every year in Ramadan since 2006, is one of these. However, as mentioned above, their rendering process is outsourced to an Indian animation studio. Moreover, some animation studios do not have the rights for their production contents and only provide services as an outsource pipeline for services including pre-production, production and post-production processes; and example of this is Ai PRODUCTION (AIProductionz, 2013).

4.2.4 Clustering

The demographic concentration of the media industry in the Emirates clusters in two cities, Abu Dhabi the capital city, and Dubai (Arab Media Outlook, 2015). According to The Animation Industry Database, most of the animation firms in the country are clustered in Dubai and Abu Dhabi (AIDB, 2015).

Examining Dubai, based on findings that will be presented in more detail in the next chapter, there are several different aspects that attract animation firms to set up in this city. One of these aspects is the establishment of media zones such as Dubai Media City, Dubai Studio City, and Dubai Internet City. These media zones have created the infrastructure to provide the services and facilities for animation firms that allow them

to exchange knowledge and gain access to distribution channels. This is because these media zones host the key broadcasters that are the main buyers for these animation firms. In addition, they increase availability for related industries and suppliers. Furthermore, Dubai hosts a number of higher education institutions that offer animation courses, as shown in Table 4 in section 4.2.2.

In terms of Abu Dhabi, which is host to the second cluster of media industry, similar aspects attract firms to this city: in particular, the establishment of Abu Dhabi Media Zone, which is known as TwoFour54, has had a significant impact on the city (Alolagy, 2013). In addition, Abu Dhabi also hosts a number of higher education institutions that provide animation courses, as illustrated in Table 4 in section 4.2.2.

4.2.5 Market Divisions

The divisions by technique of animation production in the Emirates is limited to CGI animation techniques, including 2D and 3D. There are several reasons for this limitation. Interviews with animation studios founders and co-founders show that the demand in the region mainly favours CGI techniques: in particular, the majority of clients prefer 3D as they find it more attractive. Another reason that may explain the lack of alternatives is that the skills providers focus on CGI as there is an absence of stop motion technique training.

Regarding functional divisions, it is comprised of several different divisions such as animation production for television, including advertisements, music video clips, and television series for children and adults; and producing visual effects and commercials for the Internet.

4.2.6 Organisations Supporting the Industry

This section will present a brief about organisation that provide support to the local animation industry in Emirates.

4.2.6.1 *Dubai Media Incorporated*

This is a government body that is responsible for a number of television channels, supervised by the Emirates of Dubai but which are directed to the entire United Arab of Emirates. These seven channels have various different concerns: Dubai One, Sama Dubai, Noor Dubai, Dubai Sport, Dubai Movies, Dubai Drama, and Dubai Zaman. This government body focuses on encouraging and supporting the local media industry, including animation producers (Dubai Media Inc, 2015). Sama Dubai has played marked role in supporting local television production, including animation, and in particular, pioneering Emirates animation series since 2006, including *Shaabiyat Al cartoon* and *Freej* (the role of Dubai Maida Incorporation will be discussed in more details in Chapter Five under the analysis of Government factor.

4.2.6.2 *Abu Dhabi Media*

This is the official media organization for the Abu Dhabi government. It has several different media platforms, including magazines, newspapers, radio channels, and television channels. Similar to Dubai Media Incorporated, it seeks to focus on supporting and encouraging local media production by forming partnerships with

international brands. In 2015, Abu Dhabi Media launched the first government channel for children in the United Arab Emirates, Majid Channel. This channel is based on a very popular children's magazine, *Majid*, that was established in the 1980s. *Majid* is popular among all Arab children, as it is directed to Arab children in general and is sold in all Arab countries. Majid channel adapts the comic stories from within the magazine and develops them as animation series. It has commissioned a number of local studios to produce this content (Majid, 2015). This helps to support these local firms by increasing demand.

4.2.6.3 The Creative Lab

This is an incubation program within the Twofour54, the Abu Dhabi Media Zone. It aims to support talent by offering memberships that provide talent workers in creative industries (including animation) with access to different forms of support: they can benefit from using workstations, including an industry standard computer lab and sound and editing suites; receive business consultations; or get real experience by volunteering for live projects or by shadowing, where members are allowed to work alongside an industry expert (Creative Lab, 2015).

4.2.7 Historical Development of the Emirates' Animation Industry

In this section, the historical development of the Emirates' animation industry will be presented. This development has some similarities with the historical development of the Saudi animation industry, as they share the same dubbing animation stage and are both members of GCC.

4.2.7.1 Dubbing Animation Stage

As mentioned above, this stage for the UAE was similar to that presented in the historical development of Saudi animation. The Emirates channels depended on imported animation at their beginning, where they displayed popular American animation. However, they started to display animation that had been dubbed into an Arabic language and edited to be more appropriate for the local culture. Both Saudi Arabia and Emirates are members of GCCJPPI, which has participated in dubbing several animations into Arabic, such as the popular American children's series *Sesame Street*, named in the Arabic version *Eftah Ya Simsim*, which means 'open sesame', besides dubbing Japanese animation series that were appropriate for display in Gulf Arabian communities (see section 4.1.8).

4.2.7.2 Pioneer Entrepreneurs

This stage started in the late 2000s: in particular, in 2006, the Emirates witnessed the rise of two of its pioneering animators, Haidar Mohammed and Mohammed Hareb. Haidar Mohammed was a cartoonist in a local newspaper, who then co-founded Fanar Production. Before the establishment of his animation studio in Dubai, he developed a scenario with a character for an animation project. However, he did not manage to produce this, as there was no interest from investors in local animation at that time. Then he developed his character as a multimedia game on mobile phones, which were very popular at that time. After a couple of years, these mobile games attracted the attention of the manager of Dubai channel, who encouraged Haidar to achieve his aim in producing local animation. Haidar then co-founded Fanar Production to produce the *Shaabiyat Al* cartoon in 2006 (Figure 23).



Figure 23: Shaabiyat Al cartoon by Fanar Production (2006)

Another pioneer in terms of the animation industry in the Emirates is Mohammed Hareb, the creator of *Freej* (Figure 24), which is a comedy animation series about a daily life of four old ladies from Emirates communities. Mohammed Hareb studied his bachelor's degree in general art and animation in the USA. He developed the idea for *Freej* during his study abroad in the USA. When he was undertaking an assignment that required designing an animation character that represents particular culture, he came with a character of a typical old lady from the Emirates. In 2003, after his return to the UAE, he developed a pitch for *Freej*, and showed it to a number of television channels. In 2005, he managed to set up an animation studio, Lammtara Pictures, in Dubai. In 2006, *Freej* was broadcast on the Dubai channel in Ramadan at prime time (The Economist, 2011).



Figure 24: Freej by Lammtara (2006)

4.2.7.3 The UAE as a Media Hub

As mentioned in the industry life cycle section, in the Emirates, a number of media clusters have been established since the 2000s. This has assisted in creating a competitive media infrastructure in the region. Accordingly, the country has attracted international industry stakeholders to invest in it and establish their headquarters in these emerging media hubs. In particular, the establishment of international key industry stakeholders such as Turner Broadcast Systems, Bournemouth University, and the National Centre for Computer Animation in the UK has had a significant impact. In addition, a number of popular channels directed at Arab children have established their headquarters in these media clusters. All of these animation firms have been attracted from different countries to move their businesses to the Emirates, and the number of local animation studios has also risen. As will be examined in Chapters Five, the agglomeration of international and local animation firms and organizations in these media clusters encourages knowledge and skill diffusion through networking. All of these factors help to give the Emirates a solid reputation for media industry, including animation, which makes it the obvious choice for

outsourcing animation content in the Arab region, due to the availability of skilled labour that speaks Arabic and understands the regional culture.

4.3 The Animation Industry in Egypt

Egypt has an excellent reputation for its moving image industry in the Middle East and North Africa region: it is even called the Hollywood of the East (Alrimawi, 2014). Egypt is also considered a pioneer in the moving image industry not only in the Middle East and Arab world but also amongst African countries (Kaigwa, 2011). Its first short animation film, *Mafich Faida*, was created in 1935 (see section 4.3.7.1) by the Frenkle brothers (Hano, 2008). In addition, Egypt is considered to be an outsourcing hub for animation technology services in the Arab world (Egypt Art Academy, 2009). The reason for selecting Egypt as one of the countries in the multiple case study is based on a theory driver, as suggested by Yin (2009). As mentioned in the Methodology Chapter, the selection of the multiple case study for this thesis is based on the life cycle concept from the industry development theory. Egypt thus represents an animation industry in its Established Growth stage. Furthermore, Egypt has several similar features to Saudi Arabia. However, Egypt has succeeded in developing its animation industry into an Established Growth industry, while the Saudi industry is still in its Introduction stage. Besides that, as presented above, Egypt is the first country among Arab world and African countries establish an animation industry. Thus, it is valuable to understand how it managed to develop its industry.

In this section, a qualitative analysis of the animation industry in Egypt will be conducted to present an overview of the Egyptian animation industry, identifying its

industry structure, life cycle, value chains and value structures, clustering and sectional divisions in the industry. Then, it will highlight on organizations that support the local animation industry in Egypt, before examining the historical development of the animation industry in Egypt, focusing on aspects that affected it the most at crucial times, such as the period just before World War II and the establishment of the Egyptian television industry. The data for the Egypt case study was acquired from both secondary sources, such as official websites for government bodies, and primary research, including document analysis and semi-structured interviews, due to the limited existing literature covering the Egyptian animation industry. A planned study visit to Egypt was cancelled due to the political and security issues in Egypt since early 2012: the regular protests in Cairo and violent clashes between opposing groups and security forces have made travel to the region problematic. Most of the clashes have taken place in Cairo and Alexandria, but there have also been clashes elsewhere in Egypt that resulted in deaths (gov.uk, 2014). The political situation has also affected some official websites for government bodies, so there has been no response when contacting them via email and phone, and no updates available for contact details.

4.3.1 Industry Structure and Size

There is no official database of the number or structure of animation firms in Egypt. Although contact was made with the Central Agency for Public Mobilization and Statistics in Egypt to obtain such data, the answer returned was that this data is not collected. According to The Animation Industry Database, there are 18 firms within the animation industry in Egypt (AIDB, 2015). However, some known firms have not been counted in the list on the animation industry database, which indicates that not

all existing firms have registered with this database. The available data does indicate that there is a moderate number of firms competing in the animation industry at Egypt. According to the data obtained from reviewing a number of official accounts on LinkedIn for animation studios in Egypt, most animation studios in Egypt are classified as small or medium size companies, and there is an absence of large firms that have more than 250 persons. Only few firms fall into the micro category with less than 10 persons working within them based on the author's observations. The moderate number of firms within the animation industry in Egypt indicates that there are high barriers to entering the animation market compared with the UK industry. However, compared with the Saudi animation industry, Egypt has fewer barriers to entry.

According to interviews with Tarek Ezzat (2012), an animation director and studio founder from Cairo, the animation industry in Egypt is monopolized by a few animation studios. On researching on these animation studios, the common denominator among them is that they have been founded and managed by pioneering professionals in animation art who already have a doctorate degrees in animation art or related fields. For example, Cairo Cartoon Studio was founded by Mona Abu El Nasr, who was the first known Egyptian female to gain a PhD degree in Animation from the USA, and who has experience as an academic in a Fine Art faculty; while Muheeb Studio was founded by Ali Muheeb, who introduced an animation course to higher education in Egypt for the first time (Hano, 2008). Al Zamzam Media was founded by Zinab Zamzam, another pioneering female animator. Such entrepreneurial animation studios establish loyal customers that make it difficult for new entry firms to compete (Bendazzi, 2016). In addition, pioneer animation studios in Egypt have

large economies of scale as they not only feed the Egyptian market, they also established loyal customers in other Arab countries through providing an outsourced service to most of the Arab countries such Saudi Arabia, Kuwaiti, Qatar, the Emirates, Bahrain and Oman (Bendazzi, 2016). According to Porter (1980), customer loyalty and economic scale are common entry barriers that prevent firms from entering the market. Thus, only moderate numbers have managed to enter the animation industry in Egypt. In addition, interviews with a number of studio founders from Egypt indicate that expensive initial capital outlay is another barrier that they faced when they entered the market. This is because establishing animation firms requires great deal of capital investment to cover the high costs of equipment such as professional hardware and licensed software. The moderate number of firms and high barriers to entry, with a few firms monopolizing the market, classifies the Egyptian animation industry as an oligopoly.

4.3.2 Industry Life Cycle of the Animation Industry in Egypt

As mentioned previously in Chapter Two, to determine the current life cycle stage, this study employed a modified version of Porter (1980) utilising the most common predictions for industry life cycle stages as a guide, which illustrated in Table 1 in section 2.1.2.1. Analysing the Egyptian animation industry presents a number of indicators that suggest that the animation industry in Egypt is in an Established Growth stage. One indicator that can be noted on analysing the Egyptian animation industry is that demand increased in the 1990s and 2000s (Bendazzi, 2016). In Egypt, in the 1930s, the animation industry started in its Introduction stage and demand was low, as it was only from local television, which had only two channels: only a few animation studios existed at that time. However, the demand for animation underwent

a rapid increase from domestic sources and other Arabic countries in the 1990s and 2000s (Bendazzi, 2016). In particular, the demand increased as a result of Arab media evolution as a number of satellite channels were established in Egypt and other Arab countries. According to interviews with a number of studio founders, this increase caused Egypt to experience pressing demand on its animation outsourcing services from Arab countries, in particular the GCC, which includes Saudi Arabia, the Emirates, Kuwait, Bahrain, Qatar, and Oman. Therefore, a number of studios were established to provide outsourcing services for the Arab animation industry (Alamir, 2012; Ezzat, 2012; Jamal, 2012). Due to the availability of a low-cost skilled workforce and a better media infrastructure than other Arab countries, with the establishment of its Media City, which hosts pan-Arab channels such as MBC, Rotana and ART, Egypt created a media hegemony for pan-Arab media for its moving image industries including cinema and television drama (Yushi, 2012). Although there are no official data that show the number of sales for the animation industry in Egypt, this local and regional demand is likely to have increased the growth of animation industry sales, according to interviews with the studio managers.

A further indicator that shows the Egyptian animation industry has moved to its Growth stage is the increasing number of firms that compete in the market. Although the number of firms is moderate and still relatively small, the increase indicates that the risk of establishing firms within the animation industry is now acceptable, due to the profit that can be accrued from local and regional demand.

Moreover, a common feature of the Growth stage is that the quality of products are improved as a result of knowledge creation and diffusion (Porter, 1980; Grant, 2005).

In Egypt, the quality of animation has improved compared with its beginnings due to the increase in the skilled workforce. As higher education institutions can be considered the main industry input providers (Bramwell & Wolfe, 2008), it is clear that the establishment of a number of higher education institutions that offer animation and related courses has assisted in the increased availability of skilled workforce in Egypt. In the 1970s, when Egyptian higher education started to offer animation courses, it was covered only in a single module at Helwan University (Hano, 2008). However, in the '80s and '90s, two other higher education institutions in Egypt started to offer animation programmes, The Higher Institution of Cinema in Cairo and AlMinia University in Alminia. However, only one offered an animation pathway within the Graphic department, which was Helwan University. According to an interview with Dr Layla Fekhery (2014), the programme leader for animation at the Higher Institution of Cinema, who also teaches animation courses in a number of higher education institutions in Egypt, the number of higher institutions offering animation courses increased in the 2000s as a number of international universities were established in Egypt, such as The American University, the Canadian College and The German University; in addition, a number of government college¹¹ training centres that provided animation models and pathways within related design courses emerged. Table 5 below shows the name and the location of all the higher education institution that currently offer animation courses in Egypt.

Name of the institution	Course title	Location
Helwan University	Animation pathway within Graphic Design Programme in the Faculty of the Fine Art	Helwan
Alminia University	Animation department in the Faculty of Arts	Alminia

¹¹ The term college in Egypt and most of the Arab countries refer to higher education level that is equaled to university in which it required the student to study for four years to obtain a bachelor degree.

The Higher Institution of Cinema	Animation Programmes	Cairo
Helwan University	Animation Programme in the faculty of Applied Art	Helwan
The German University	Computer graphic module within Media Engineering and Technology faculty	Cairo
The American University	Animation module within Art of Film Programme	Cairo
The Canadian College	Broadcasting module within Mass Communication Programme	Cairo
October 6 University	Animation module within Media Programme	October 6
October 6 University	Animation module within Cinema and Television Programme	October 6
The Higher Institution of Arts	Animation Programme	Cairo

Table 5: Higher institutions that offer animation in Egypt (by Ohud Alharbi, 2016)

However, in contrast to a Mature animation industry such as the UK, which has a much greater number of higher education institutions with animation programmes (Kenny & Broughton, 2011), this indicates that Egypt does not have sufficient animation education providers to enable it to move its animation industry from the Growth to the Maturity phase.

Another aspect that has assisted the improvement in quality of animation production in Egypt is that more investment has been received from local broadcasters and broadcasters from other Arab countries. This investment is likely to have assisted new entrants to overcome capital requirements. According to an interview with Jamal

(2012), the manager of Cairo Cartoon Studio, in the 1990s, the Egyptian Television and Radio Union was a strategic partner for the animation studios in Egypt and incurred all the production costs. Such significant investment from this key body in Egypt assisted many studios with investing more in improving their capacity and capability.

4.3.3 Value Chains and Value Structures

In Egypt, the animation industry faces high barriers to entry. One of these barriers is the financial requirement of starting in the business. The industry here has therefore adopted a strategy to reduce these costs by using vertical integration, where the whole process of animation production is done within the same studio, and interviews with animation studio founders show that firms prefer to adopt such vertical integration. According to Porter (1980), vertical integration is the best strategy to reduce costs where all the process in the value chain being undertaken by a single firm. In contrast, many firms in the UK and Emirates outsource some production processes to different suppliers outside their countries, such as Asian countries or East European countries due to their access to low-cost workforces.

In terms of value structures in the animation industry in Egypt, some firms own the rights to production content, including scripts and characters as well as performing the production and post-production processes. An example is Cairo Cartoon studio, with *Bakkar*, a children's animated series that has also developed a merchandise brand. On the other hand, some firms do not have the rights for the production content and only perform practical processes as an outsourced pipeline, such as the Tarek Rashed

studio, which makes *Khosa Bosa* for an Emirates client who owns the production rights for content including scripts and characters.

4.3.4 Clustering

This section focuses on analysing existing clusters within the animation industry in Egypt and highlighting the main aspects that have assisted the establishment of clusters in specific locations in Egypt.

According to The Animation Industry Database, most Egyptian animation firms are located in Cairo, the capital city of Egypt: around 10 out of 18 firms cluster in Cairo, while the rest are scattered among six different cities (AIDB, 2015). Porter mentioned in his cluster definition (1980) that firms tend to cluster in a location that has a range of skills providers, suppliers, and organizations that support their business. In Egypt, Cairo hosts a number of skills providers thanks to its range of higher education institutions that offer animation and related courses such as computer graphics, media production, visual communication, video broadcasting, advertising, studio production, television script writing, filmmaking, video editing, and film directing (Table 5). These institutions include The Higher Institution of Cinema, The Fine Art College (which is a branch of Helwan University located in Cairo), The American University, The Canadian International College, The German University and the Higher Institution of Arts.

An analysis of the existing literature on the media industry in Egypt makes it clear that there are several different major organizations within the media industry that are

located in Cairo city, or close to it, which make it an appropriate location for entrepreneurs within the media and animation business to launch their firms.

One of these organisations is the Egyptian Radio and Television Union, the main commissioner and producer for animation production in Egypt. Findings from the empirical study show that animation studios' founders favour siting their studios in Cairo city because of this link. According to an interview with Jamal, Cairo Cartoon Studio's manager (2012), Egyptian television is a strategic partner due to its supportive role in funding animation production. Furthermore, another important organisation is located in Cairo city, the National Centre for Cinema, which is authorized by the Ministry of Culture in Egypt. The National Centre for Cinema is also a supporter of animation film production in Egypt, commissioning and funding new work as well as taking a role in promoting new films by screening them to the public (Ministry of Culture, 2012). Some other major organizations that support the Egyptian animation industry are also located in Cairo, such as the General Organization for Culture Palaces, which is also authorized by the Ministry of Culture in Egypt, and which has a marketing role in terms of organizing events, workshop, lectures, film competitions and festivals for the cultural industry, including animation (Ministry of Culture, 2012). Moreover, the Animation Guild of Egypt, which was established in 2012 also located its office in Cairo city. It aims to support individuals within the animation industry in Egypt to improve their positions and to deal with issues arising, alongside creating a strong network linking professionals and new talent in related fields to the animation industry (cinema2y, 2013).

According to an interview with Adel (2013), the co-founder of Aljazeera Animation Studio, the location of the Media Production City in Giza is very close to Cairo city, and this has also played a significant role in terms of attracting media production firms, including animation studios, to locate in Cairo. Media Production City hosts the headquarters of a number of local and pan-Arab satellite channels such as MBC, ART, and Rotana.

4.3.5 Market Division

This section discusses the market divisions in the animation industry in Egypt with regard to both techniques and function. As mentioned, there is a limited historiography for the animation industry in Egypt, and hence the data on market divisions was obtained from animation studios' official websites, as well as interviews with studio managers.

Divisions by techniques used in animation production in Egypt highlight the use of a variety of methods. The industry utilises 2D, which could be the traditional cell technique or modern versions that use CGI, as well as 3D techniques made by CGI. In addition, stop motion techniques that use clay models are also used. Reviewing the official websites for different animation studios in Egypt suggests that most studios offer 2D and 3D animation. However, stop motion animation seems to be less popular; the first Egyptian stop motion animation was produced in 1998 by Al Zamzam studio using clay figures, and this animation was also the first known stop motion animation in the Arab World (Alzugbi, 2015). According to the interview with Jamal (2012), there is very little demand for stop motion animation in Egypt and other Arab countries, and thus, only a few studios have experience in this technique, which

requires highly skilled professionals that are not easy to find in Egypt. By interviewing managers of selected animation studios in Egypt it becomes evident that the highest demand is for 3D CGI animation, followed by 2D CGI animation with little demand for stop motion animation. According to Mohamed Alamir, Clear Picture studio founder, 3D CGI is the technique in the greatest demand because of its attractiveness to the audience, alongside its potential for special effects such as lighting, which make it more realistic than the 2D technique.

With regard to functional divisions, animation production in the Egypt is similar to that of the Emirates. It has products that include animation production for television such as advertisements, music video clips or television series for children and adults, and a range of visual effects and commercials for the Internet. According to interviews with animation studios' founders, most of the production is for advertisements and television motion graphics. This is because producing animation for advertisements is more profitable and takes less time and effort compared with producing films or television series, which can take more than a year and require a large numbers of animators. Moreover, there is an increasing demand for animated series targeted at both adults and children, as well as steady demand for animated video clips for children's songs.

4.3.6 Organisations supporting the Animation Industry

In Egypt, there are few associations that support the animation industry that this section will present.

4.3.6.1 Egyptian Television and Radio Union

Egyptian television was established in Cairo in July 1960. It was the first television station in both the Middle East and Africa (Yushi, 2012), and it started by broadcasting one channel for six hours daily. Subsequently, one year after Egyptian television was established, a second Egyptian channel began broadcasting for three hours daily, whilst the broadcasting time for the first channel increased to up to ten hours daily. A third channel was broadcast in 1962, bringing the total time for Egyptian television broadcasting to about 26 to 30 hours daily. However, in 1967, the third channel was cancelled. In 1985, six channels were added to cover different parts of the country, bringing the total number of Egyptian terrestrial channels to eight. Further development in Egyptian television occurred in 1990, when the Egyptian Space channel started, which was the first Arabic Space channel, followed by the emergence of the Nile channels, which included six channels covering different categories such as drama, sport, and children's shows (Ward, 2008).

Egyptian television included Production Departments that aimed to provide Egyptian and other Arabic channels with a variety of media productions such drama and animation series. Moreover, it focused on different issues that were of concern to Egypt and the Arab world and reflected life in those societies. It also offered a variety of media productions such as educational and entertainment programs (Ministry of Information, 2012). Egyptian television has therefore played a marked role in the animation industry: it even has a special unit for producing animation contents (Hano, 2008). Thus, it is considered as a strategic partner for animation studios in Egypt due to its support and sponsorship of local animation production, as noted by Jamal (2012).

4.3.6.2 The General Organization for Culture Palaces

The General Organization for Culture Palaces is an organisation that authorized by the Ministry of Culture in Egypt. It was established in 1945. It supports the animation industry through launching workshops, master classes, festivals and competitions for the cultural industry including the animation as well (Ministry of Culture, 2012).

4.3.6.3 The Animation Guild of Egypt

The Animation Guild of Egypt was established in 2012 in Cairo. It is an organization that was founded to represent labour within the animation and visual effects industry in Egypt, to improve this creative industry and focus on finding solutions for the challenges that people who work with animation face. This organization holds several events and workshops that aim to transfer animation knowledge and skills to the general public as well as to exchange knowledge between its members. Moreover, it seeks to establish networking and partnerships with other local and global organisations connected to the animation industry (Abbas, 2013).

4.3.7 Historical Development of The Egyptian Animation Industry

In this section, the life cycle of the Egyptian animation industry will be divided into three generations: early animation; animation after the rise of television; and animation in a cultural and academic context.

4.3.7.1 Early Animation

The animation industry in Egypt deep roots, having been active since 1935. The Frenkle brothers, David and Shlomo, were the pioneers of the animation industry in Egypt (Kaigwa, 2011). After watching a *Mickey Mouse* cartoon, they decided to create their own animation, and they asked an Egyptian businessman to invest in the animation market. However, this businessman told the Frenkle brothers “Mafich Faida”, which is an Arabic phrase that means “there is no benefit”. Subsequently, they decided to establish the first animation studio in Egypt and asked the same businessman if he wanted to invest in the studio. He answered “bukra fi al mishmash”, which is an Arabic expression used to imply something that will never happen. Nevertheless, the Frenkle brothers did not give up and they started designing a cartoon character and learned how to animate it. They called their character “MishMish” and produced their first animation film *Mafich Faidah* (Figure 25).



Figure 25: Mafich Faidah by Frenkle brothers, 1935 (Hano, 2008)

Both the character's name and the film's name were inspired by the businessman's answers. The features of the characters are similar to those of Mickey Mouse and Felix the Cat. The first showing of *Mafich Faidah* was in 1936 at the Cosmos Cinema in Cairo, but as a result of its success, the film was shown until the end of 1939. Moreover, in 1937, the Egyptian Ministry of Agriculture asked the Frenkle brothers to produce an animated educational campaign to instruct farmers about cotton parasites and how they could protect their cotton fields from them, due to the fact that the majority of farmers were illiterate (Hano, 2008), and animated instructions were deemed the most appropriate medium. Subsequently, in 1939, the Frenkle brothers produced an animated film at the request of the Egyptian-British Authorities under the title of *The National Defense* (Figure 26). The aim of this animation film was to encourage the army due to the Second World War (Hano, 2008).



Figure 26 : The National Defense by Frenkle Brothers ,1937 (Hano, 2008)

In 1942, another achievement in Egyptian animation was produced by a Fine Art graduate student, Anton Salim, who had worked as a Fine Art Teacher and produced an animation film under the name of *Dudu*. The film was about ten minutes in length.

After that, he produced other animation productions, including short animation films and animation scenes for the opening sequences of live action films. Importantly, he designed and animated entire scenes, including characters and backgrounds, by himself in his Egyptian studio at Cairo. Subsequently, in 1972, he moved to the United States and worked as an animator in the Hanna Barbera studio (Hano, 2008).

4.3.7.2 Animation After the Rise of Egyptian Television Channels

In 1958, Ali Muheeb, who was a lecturer in the Fine Art College, together with his brother, Hussam, began to produce animation films. These animation productions developed a great reputation in the country (Hano, 2008). Fortunately, this success coincided with the establishment of the first Egyptian television station in 1960, which led to a significant advance in the Egyptian animation industry. Ali and Hussam were chosen to manage the Animations Unit for Egyptian television in 1961, and in the animation unit, the two brothers were involved in training talented students who graduated from the fine art college in how to animate their drawings. This training led to the creation of an inspired generation who assisted the flourishing of the Egyptian animation industry (Nassar, 2010).

4.3.7.3 Animation in a Cultural and Academic Context

In 1967, Tharwat Aukashah, the Minister of Culture, founded the National Centre for Documentary and Short Film, which had a unit for animation films. This Centre attracted creative animators to create the short animation films that the Egyptian cinema thrived upon. Furthermore, this Centre was supported by the experience of a professional animator from Czechoslovakia, Vladimir Leaky, who was tasked with training local animators in different techniques (Hano, 2008).

In 1967, Ali Muheeb added a module of animation art to be taught to Fine Art students at the College. Then, as a result of the increasing numbers of students who showed an interest in the animation module, a special path for graphic and animation study was established in 1973 in the Fine Art Faculty, where students were able to specialize in animation art for their undergraduate studies (Hano, 2008; Nassar, 2010). Moreover, for the first time, the Egyptian Government sent a graduate Fine Art student, Ahmed Almadini, to Romania and then to Czechoslovakia to study animation. In 1968, he achieved a Doctorate level degree of animation, then assisted in the establishment of the Animation Department at the Higher Institute of Cinema in 1975. This offered Egyptian students the first opportunity to study an academic degree in animation art (Egypt Art Academy, 2009). Subsequently, the animation industry has developed in Egypt since being supported by several different authorities such as the Education Ministry and Culture Ministry.

4.3.7.4 The Establishment of Animation Outsource Service Providers in Egypt

As mentioned in the industry life cycle for the animation industry in Egypt, the 1990s and 2000s were a very significant time for the Egyptian animation industry (Bendazzi, 2016). This was because of the Arab media evolution, when a number of satellite channels were established in Egypt and other Arab countries. As Egypt was a pioneer in terms of film and the animation industry among Arab countries, it became the centre for most of these channels; it also had the first Media City (Yushi, 2012). Egypt started to provide outsourcing services for several media industry production types, including animation due to its availability of skilled labour. Consequently, it

became the outsource hub for the animation industry in the region. Thus, even more animation studios have been established to cover the massive demand generated, and more skills providers have been established (Hano, 2008).

4.4 The Animation Industry in the UK

The UK is a country with a worldwide reputation for its animation industry, with animations such as *Wallace and Gromit*, *Bob the Builder*, and *Noddy* that have been exported to many different countries (Kenny & Broughton, 2011). In this section, an analysis of the animation industry in the UK will be presented to give an in-depth understanding by identifying the industry structure and life cycle, and examining the firm structures that firms within this animation industry adopt. Moreover, the sectional divisions in the industry will be highlighted. Then, industrial clusters within the UK animation industry will be identified, followed by a delineation of key organizations supporting the animation industry. After that, a brief historical overview of the development of the animation industry in the UK will be presented in order to note the most significant changes that have affected the industry.

4.4.1 Industry Structure

Although the entry barriers to the animation industry are high, a large number of firms have managed to enter the UK animation industry. According to Skillset, the number of people working within the animation industry in the UK in 2010 was around 4,700 people (Skillset, 2010), but by 2015, that number had reached 7,750 (Creative Skillset, 2016). There are about 600 firms in the animation industry located around the country (Kenny & Broughton, 2011). According to Skillset (2008), the animation

industry in the UK is mainly populated by micro companies that have less than ten persons, while the second largest group is SMEs (small and medium sized firms) that have between 50 to 250 persons. However, there is a minority of large firms with more than 250 persons (Skillset, 2008). Due to the number of micro and SME firms, and its size, the animation industry in the UK can be classified as a fragmented industry. A fragmented industry is described by Porter (1980) as any industry that has many firms competing due to low entry barriers.

The animation industry in the UK is classified as monopolistic competition, as this structure refers to a market in which many competitors provide equivalent products that can be differentiated based on characteristics which go beyond simple cost. In other word, monopolistic competition includes product differentiation, which means each seller carries goods that have some unique properties in the view of the consumer (Krugman, 1979). An example of product differentiation in the UK animation is Aardman Animation Studio, which has a reputation for its production features that include using characters with similar identities that can be recognized as Aardman productions such as those in *Wallace and Gromit*, *Timmy Time*, and *Chicken Run*. Although these represent different creatures, it is very clear visually that they have similar identities.

4.4.2 Industry Life Cycle for the Animation Industry in the UK

As mentioned in the Chapter Two, this study uses a modified version of Porter's (1980) most common predictions for industry life cycle stages as a guide to the analysis of the industry life cycle. This modified classification for different characteristics of the industry life cycle stages is used as a lens to determine the

current stage for a given animation industry. In terms of the UK animation industry, the characteristics of the Mature stage apply. According to Porter (1980), an industry is considered to be in its Mature stage when there are many firms competing within the industry; there is high demand for the product; and the quality of the product is excellent.

One important indicator shows that the UK animation industry has reached its Mature stage is the large number of industry entries. There are about 600 firms competing within the animation industry in the UK (Kenny & Broughton, 2011), and analysing the UK animation industry shows that there are different aspects that assist in increasing the number of entrants to the UK animation market. One of these is that the UK has a history of experience in animation that has enabled diffusion of the necessary knowledge for making animation films across the UK. Animation films have been seen in the UK for very long time, at least since 1899. In addition, the early establishment of animation programmes within the higher education institutions of the UK resulted in additional availability of skilled labour, which assisted the growth of the industry. The availability of distribution channels, such as film festivals, since the earliest time has also helped, and there are now 32 animation festivals across the UK (animation festivals, 2017). All these aspects have facilitated firms entering the animation market.¹²

Another indicator that shows that the UK animation has reached its Mature stage is the excellent quality of its animation. This is clearly can be seen from the large scale of UK animation, which is also indicator of high demand. UK animation revenue has

¹² The issues will be discussed in more detail in Chapter Five.

reached £300 million annually, and its productions have been exported to many different countries (Kenny & Broughton, 2011). In addition, animation films from the UK have won many international awards. For instance: the feature animated film *Wallace & Gromit: The Curse of the Were-Rabbit* won the Academy Award in 2005 for the best animation film (Aardman, 2016). This excellent quality of animation is due to several different aspects. One of these is the availability of skills providers: in the UK, there are about 53 higher education institutions that offer animation and related programmes (Kenny & Broughton, 2011). In addition, the level of investment that animation studios in the UK receive compared to those in the Saudi Arabia, Egypt, and the Emirates enable them to develop their capabilities and potential more effectively. The main broadcasters in the UK provide funding for producing animation; Channel Four in particular played a considerable role in commissioning animation during the 1980s (see section 4.4.6.3), and the BBC played a role in commissioning local studios to produce its animation programmes during the 2000s, after the establishment of its two channels that targeted children (see section 4.4.6.4).

4.4.3 Value Chain and Value Structure

In the UK, animation firms are structured in a variety of ways. Some of them have adopted vertical integration where the whole process of animation production is done within the same studio; one example is Aardman Studios where the pre-production process of designing and model making the puppets is done by the studio members as part of the process of animation (Aardman, 2013).

On the other hand, some studios work in networks due to their limited capacity for production. Therefore, they are structured in a horizontal integration, and the studios

outsource parts of the process, such as pre-production or post-production processes, to another local or foreign studio. For instance, Chapman Entertainment productions commissioned a pre-production process, which included designing and model making from Mackinnon & Saunders, who are one of the world's leading puppet making businesses (Mackinnon & Saunders, 2013). In addition, some animation studio that provide outsourcing services for production processes, such as 3Line Media animation.

In terms of animation industry value structure, in the UK, the value structure has more complexity than in the other countries studied in this thesis, as many different organisations are involved in it. In the UK, some animation studios own the rights to content, such as Aardman Animation, which owns the rights to Wallace & Gromit and carries out all of the process for production including pre-production, production and post-production. However, some animation productions were original generated by an entertainment production company that then owns the brand but is not involved in the technical tasks of animating and finishing the animation content. An example of this is V&S Entertainment, which owns *Rosie*, a British animation series that was animated by AProduction Animation Studio, based in Bristol, and produced by the CBeebies Channel (V&S entertainment Ltd). Furthermore, an animation production could be owned by an animation studio that partners with a broadcaster to facilitate production, such as Sarah & Duck, which was created and developed by Karott Entertainment Animation Studio and produced by the BBC.

4.4.4 Clustering

The media industry in the UK has a strong pattern of geographic concentration. Firms within the media industry favour locations with existing networks as they have similar production system characteristics as well as similar specialised functions, and thus as well as promoting dense inter-firm networks and relationships, physical proximity assists the efficiency of transactions and information exchange between firms (Scott, 2005).

Around 70 to 90% of total UK employment within different media industries is clustered in London; however only 33% of animation firms (with around 1,500 employees) are located in London, which nevertheless represents the largest industrial cluster in the UK animation industry (Skillset, 2010). In particular, firms tend to concentrate in a specific area in London called Soho, where there is an industrial cluster for the media industry that includes suppliers, producers and distributors for various media industry sectors such as music, publishing, and film as well as the animation industry (Nachum & Keeble, 1999). An important factor that has made Soho a favoured choice for media firms is the location of the three main broadcasters in the UK, the BBC, ITV and Channel Four, in this area. Therefore, many small and medium sized companies have established in Soho, including pre-production and post-production firms (Pratt, 2010). London also has a number of higher educational institutions offering courses related to the subject of animation.

The second largest concentration of UK animation studios is clustered in Bristol, where the most famous British animation studio, Aardman, is located, alongside a considerable number of smaller studios. A total of around 800 people work within the

animation industry in this area (Skillset, 2010). Bristol is also known for its documentary film industry. A significant factor that assisted Bristol's development as a cluster for the animation industry was the establishment of the BBC Animation department in Bristol, as this encouraged the animation industry by launching an initiative in 1991 that targeted independent animation companies and aimed to commission, produce, and co-produce high quality animated films (Burns, 2005). Again, Bristol has a number of education institutions that offer higher and further education courses related to animation such as films, televisions, media, multimedia, graphic design, computer animation, and game design (Burns, 2005). In particular, the University of the West of England is considered to be a centre of animation excellence (UWE, 2014). According to Louise Jennings, marketing office at the University of the West of England, "*Students are attracted to Bristol and our courses partly thanks to the reputation of the professional training courses we run but also because of the reputation of Bristol as a centre of animation*" (Burns, 2005). A consequence of the talent graduating in Bristol is that more firms establish themselves in the area to gain access to this talent pool (Burns, 2005).

The third largest cluster in the UK animation industry is concentrated in Manchester (Hume & Sizer-Coy, ND). According to Westly Wood, who is a producer and director at CITV: "*Manchester is quickly becoming the capital of animation production.*" Wood believes that the important factor that give Manchester a reputation for animation and has led to the establishment of many animation studios is the success of Cosgrove Hall Films, a British animation studio established in 1976 (Cullen, 2014). Wood explained "*By growing such a big media/animation company within the area and because they were obsessive about developing and training talent,*

Cosgrove Hall Films has become the cornerstone to the creative and digital world as we know it – particularly animation,” (Cullen, 2014). Another factor that is now assisting the concentration of the animation industry in Manchester is MediaCityUK, which was opened at 2011 with key broadcasters such as BBC and ITV, who are considered to be significant commissioners and producers, as its occupants (MediaCityUK, 2014). MediaCityUK also hosts a Salford University campus where over thirty undergraduate and postgraduate courses related to media industry are taught, which allows students and staff to use the latest industry standard equipment and access professional studios and labs (University of Salford, 2014). As well as Salford University, Manchester has another higher education institution that offers courses related to animation, Manchester Metropolitan University (MMU, 2014). This combination of suppliers of qualified labour has made Manchester an appropriate location for animation enterprises.

4.4.5 Market Division

This section will sketch the market divisions for the animation industry in the UK, with regard to techniques and functions.

In terms of technical market divisions, most of the UK animation firms produce 2D and 3D animation. The 2D work may be in the traditional cell animation format or in the form of CGI. Several stop motion techniques that use clay or puppets are also used (Kenny and Broughton, 2011). According to interviews conducted for this study, some studios specialise in one technique such as 2D or 3D, while other studios combine different techniques.

In terms of functional divisions, according to the Skillset report (2008), the majority of animation studios are engaged in production for television, including advertisements, music video clips, and television series for children and adults. The second largest group feature films, while a number of studios produce visual effects and commercials for the Internet (Skillset, 2008).

4.4.6 Organizations supporting the Industry

In this section, some key organizations in the UK that have played a significant role in supporting the animation industry will be highlighted.

4.4.6.1 British Film Institution

The British Film Institution (BFI), is a nonprofit organization that was founded in London by Royal Charter in 1933. This organization was established to support the moving image industry, which accepts animation films as one of its forms (Burrows, 1997). The BFI seeks to encourage the use of the moving image industry to document contemporary life and manners and to support and encourage education in the moving image industry by launching initiatives and running courses. Moreover, the BFI runs the London Film Festival every year, which is the largest UK film event; as well as screening films, the London Film Festival runs lectures and forums delivered by experts in the film industry. The BFI has the largest film archive in the world that contains both British and international materials (BFI, 2015).

4.4.6.2 Creative and Cultural Skills

Creative and Cultural Skills (CCSkills), is one of the Sector Skills Councils that was founded by the UK government in 2004. It aims to encourage the creative industry by improving the availability of skilled human resources in the creative and cultural industries. The rationale of this organization is to establish links between the industry, education, and government. To accomplish its aims, CCSkills set up The National Skills Academy for Creative & Cultural Industries in 2009. This academy is a network that links partners from education and industry, who work in collaboration to provide skills and training for the creative and cultural industries. In fact, The National Skills Academy for Creative & Cultural Industries launches several events yearly around the UK to present information and provide demonstrations for the creative and cultural industries, which offer an opportunity for those who seek to specialise in these fields. (CCSkills, 2015).

4.4.6.3 Channel 4

Channel 4 is a British public television broadcaster, which started to broadcast on November 2, 1982 (Kitson, 2008). There is no doubt that Channel 4 has a remarkable reputation for promoting British animation due to a commissioning strategy that has played a significant role in supporting the animation industry in the UK (Kitson, 2008). This strategy was focused on supporting unknown artists by commissioning them to produce animation to be broadcast (Norrise, 2012). In 1981, a year before launching Channel Four, Jeremy Isaacs, the Channel Four chief executive, attended the Cambridge Animation Festival, and he was interested in some participants' short animation films. As a result, he tasked his commissioner editor, Pull Madden, with commissioning some significant animators to produce animation films to be

broadcasted on the Channel 4 screen during its first year; *Conversation Pieces* and *The Snowman* were among these primary productions. This step by Channel 4 made it a national powerhouse for the animation industry (Kitson, 2008), and it has also collaborated with the Arts Council of England to launch The Animation Initiative. This initiative aims to encourage the development of experimental animation for television, providing a high-profile platform for the animation industry in the UK.

4.4.6.4 The British Broadcasting Corporation (BBC)

The BBC is a British public broadcaster that was launched in 1922. The BBC now runs several television channels in the UK, including BBC One, BBC Two, BBC Three, BBC Four, BBC News, BBC Parliament, CBBC, and CBeebies (BBC, 2015). The BBC is the most significant commissioner of indigenous media content (BBC Trust, 2013), overall, including animated content (Ofcom, 2013). In 2006, BBC launched the WOCC, the Window of Creative Competition initiative, to encourage local media production companies to produce media content such as live action and animation series. That initiative came after the launch of the child-oriented channels CBBC and CBeebies in 2002. CBBC targets children over six years old and CBeebies targets children in early childhood, under six years old (Steemers, 2010). CBBC and CBeebies were the first children-targeted channels owned by a British broadcaster (Steemers, 2010). The BBC department for children, which supervises all children's programs for BBC channels, stated that around 40% of its commissions were from the local independent sector in 2006/2007 (Steemers, 2010). According to Voice of the Listener & Viewer reviews (2013), BBC children's channels display high levels of UK content and they broadcast a large proportion of locally made television content; overall, about 30% of their content is animation productions. The BBC has played a

significant role as a supporter of high quality, home-grown animation productions, as one of its public purposes is stimulating creativity and cultural excellence (BBC Trust, 2013). In addition, the BBC children's channels support the local animation industry by limiting the amount of foreign animation content broadcast. CBBC and CBeebies broadcast 80% local children's programmes, which includes animation programmes, while most rivals broadcast more than 75% non-local children programmes. The BBC strategy of working with a range of suppliers, both large and small leads to stimulation of creativity and cultural excellence in the local animation industry (BBC Trust, 2013).

4.4.6.5 Creative Skillset

Creative Skillset is a strategic organization that was established in 1992 by the UK government and industry as part of the Sector Skills Councils. It is an industry body that represents the creative media industries, which include film, television, radio, animation, visual effects, games, fashion, textiles, publishing, advertising, and marketing communications (Skillset, 2010). Creative Skillset aims to support talents and develop the creative industry in the UK due to the fact that the UK's creative industries make a significant contribution to the country's economy. Creative Skillset's function covers three key areas. Firstly, identifying problems where there is a scarcity in particular skills in order to request assistance from the government and related industries to solve the problem; secondly, working in collaboration with training providers and qualification development bodies such as universities and similar institutions to stimulate competition in the creative industries; and finally, providing individual who seek to enter the creative industry with information about the industry, prospective career opportunities, and ways to develop themselves in the

future to join the industry (Creative Skillset, 2014). Creative Skillset works with employers, key partners, and stakeholders to conduct research, and this is easy to access via regularly updated reports on its official website, where it also provides important information for individuals to guide them to find courses that fit with their skills. Creative Skillset has also contributed to the UK animation industry by setting up the Animation Skills Council, which has a responsibility to conduct in-depth research on the animation industry to find the gaps and identify shortages and weaknesses. The Animation Skills Council's own research covers investigations into the workforce and existing training provision institutions. The findings of this research are used to develop a strategy for the animation sector and to deliver priorities and recommendations for animation industry stakeholders to ensure that the UK animation workforce and training provision are the best, securing growth for the industry.

4.4.7 The Historical Development of The UK Animation Industry

This section will highlight the history of the animation industry in the UK by dividing it into different periods.

4.4.7.1 Early Experiments on Persistence of Vision

The principle of animation was based on the phenomena of persistence of vision, first explained by a British physician Peter Mark Roget in 1825 in his paper "Explanation of an Optical Deception in the Appearance of the Spokes of a Wheel Seen through Vertical Apertures (Kenny & Broughton, 2011). At that time, the thaumatrope, an optical toy, was invented by the British physician John Ayrton Paris, and he used it to

explain persistence of vision to the Royal College of Physicians in London. This explanation of persistence of vision has been recognized as a significant antecedent that assisted in laying the groundwork for the moving image industry (Bendazzi, 1994). In 1872, Edward Muybridge, a British photographer, was a pioneer in the field of moving pictures. He used sequential photos of different figures of animals and humans and displayed them using a zoopraxiscope (Arthur, 2002). In 1899, the first animated film was made for a match company by the British Arthur Melbourne-Cooper company, using a stop motion technique (Kenny & Broughton, 2011).

4.4.7.2 The Animated Cartoon in The Silent Film Era

Animated cartoon is the term utilised in this section because the first animation films in this era were all based on cartoons that were published in magazines and newspapers. In 1923, the British cartoonist George Ernest Studdy made his cartoon film *Bonzo The Dog*, based on a very popular cartoon character in magazines at that time. However, as an animated film, it did not gain the same reputation (Stephenson, 1973). In 1925, *Jerry the Tyke* was made by Sid Griffiths and Brian White as an animated silent short film, which was displayed in the cinema and gained a positive reputation (BBC News, 2012). After the success of *Jerry the Tyke*, Griffiths and White set up a company together in 1929, in London, where they produced commercial advertisements for the Super ads agency using animation techniques (British Cartoon Archive).

4.4.7.3 The Animated Propaganda Era

The '30s and '40s was a very significant time for the animation industry in the UK because Public Information Films, a series of governmentally commissioned short films, were displayed in UK cinemas. These short films were directed at the general public to instruct them about safety during the Second World War (the national archive, 2016), and after the establishment of the first British television channel in 1936, these Public Information Films were also displayed on the television screen during the advertising breaks to educate the audience about issues related to daily life such as health, education, rights, and safety (The National Archive, 2016). These short films were ground-breaking for the animation industry in the UK, as several short animated films were commissioned.

Although the Public Information Films began by communicating their messages using live actors, animated films were found to have more ability to communicate messages in an attractive way (Halas, 2015). The demand for animated film led to the establishment of several animation studios in the UK such as Halas & Batchelor, Dart Film, and Larkins, which all received commissions from the Ministries of Information and Defence (Bendazzi, 1994). The Halas and Batchelor Cartoons Films studio was the most successful studio at that time. It was founded by John Halas and Joy Batchelor, who also worked together on the English colour cartoon *Music Man* (Stephenson, 1973). This studio produced about 2000 films for different purposes including commercial advertisements, educational announcements, and TV series (Halas, 2015). The Ministry of Information and Defence commissioned Halas & Batchelor to produce short animated films that conveyed various messages to the audience during the Second World War. For that purpose, they produced seventy

short films at less than ten minutes for each film; their film titled *The Handling Ships*, which was the first British feature stop motion animation film, was an exception, at seventy minutes in length (Bendazzi, 1994). In 1943, the Halas & Batchelor produced the *Abu Series* of anti-Nazi propaganda, which portrayed a small Arabic boy facing fascism. Another popular informative animated film produced by Halas & Batchelor in 1947 was the *Charley Series*, which included eight episodes communicating several issues to the general public (Bendazzi, 1994). The demand for animated short films during the period of the Second World War and the post-war period increased due to its proven flexibility in communicating messages.

4.4.7.4 The Flourishing Era of the UK Animation Industry

After the success of the animated propaganda during the Second World War, animation studios continued to produce instructional and educational films as well as directing their focus towards entertainment. In 1954, *Animal Farm* (Figure 27), the first British feature animated film, was produced for entertainment purposes, despite its political implications. *Animal Farm* was produced by the most successful animation studio in the UK at that time, Halas & Batchelor. This film took two years and about seventy animators to be completed, and it gained a wide reputation for its quality (Bendazzi, 1994).



Figure 27: *Animal Farm* by Halas & Batchelor, 1954 (The Halas & Batchelor Collection, 2015)

In other parts of the entertainment market, the British animation industry presented its first television series, *Foo Foo*, in 1960 as well as *Snip & Snap* (Figure 28) (Stephanson, 1973).



Figure 28: *Snip and Snap*, 1960 (Vivien Halas, YouTube video, 2010)

Another significant production in UK animation history was *Yellow Submarine*. It was produced in 1968 by TV Cartoon Studio. *Yellow Submarine* was the second British animated feature film, and it was based on the music of The Beatles, the English rock band. It is considered to be one of the most significant British animated films of the sixties (Norrish, 2012). According to Clare Kitson: “*The Yellow*

Submarine is considered as an icon of Britain's 'swinging '60s'" (Kitson, 2008). The success of *Yellow Submarine* inspired schools and colleges to find a place in their curricula for animation (Stephenson, 1973), and British universities started offering animation as an academic discipline (Wu, 2010). In 1963, the Royal College of Art and The National Film School offered courses covering disciplines related to animation such as film making for postgraduate students, while the West Surrey College of Art and Design was the first British educational institution to offer a full-time BA animation course, in the early 1970s (Kitson, 2008).

4.4.7.5 The UK Animation and Global Competition

A significant aspect of UK animation industry history was the establishment of Channel 4, due to its considerable role in supporting the animation industry by adopting a commissioning strategy (Kitson, 2008). In 1982, Channel 4 broadcast *The Snowman*, a short animated film that was commissioned from the TV Cartoon Studio and was directed by John Coates (Norris, 2012). Pull Madden, as part of his task to seek out significant animators from the Cambridge Animation Festival, was also attracted by David Sproxtton and Peter Lord's *Animated Conversation* that was produced for the BBC, so he commissioned them to produce *Conversation Pieces* for Channel Four. The commissioning strategy of Channel 4 during the eighties and nineties assisted the British animation industry in establishing a solid foundation which in turn led to several British animated films winning Academy Awards between 1990 and 1995 (Kitson, 2008). In the 1990s, a number of satellite commercial children channels were launched, such as Disney and Cartoon Network, followed by the launch of the BBC children channels CBBC and CBeebies in 2002,

which increased the demand for children's programme production, including animation (Ofcom, 2013).

4.4.7.6 Sustaining the UK Animation Industry

In 2013, the UK government launched a tax relief programme as a response to 'Save Animation UK', a campaign launched by British animators seeking equality with the film industry, which already enjoyed tax relief. The rationale for this campaign was to prevent the outsourcing of British animation outside the UK due to lower costs, which would have a negative impact on most British animation studios. The initiative aimed to support the animation industry by offering a new scheme for tax credits that reduced 25% of the total tax that animation production companies paid. According to George Osborne, the Chancellor of the Exchequer: "*The UK now has one of the most competitive tax regimes for the creative industries*". This tax relief has indeed encouraged the establishment of new animation studios at the UK, and moreover, it has attracted international producers to partner with British studios to invest in the UK (Hyatt, 2014).

4.5 Chapter's Discussion

This section presents a discussion of the findings presented and an analysis of the animation industry in each of the studied countries. These findings will provide a foundation for the development of the Theoretical Model by helping to create a better understand of the conditions that apply to each stage of the animation industry life cycle and the barriers that might obstruct each stage. This understanding will guide the researcher in terms of applying the appropriate strategies for each stage, which

will be extracted from an analysis of the research framework in the next chapter (see Chapter Five).

4.5.1 Discussion on the Saudi Animation Industry

An analysis of the animation industry in Saudi Arabia (see section 4.1) within the current study reveals that there are several characteristics particular to the Saudi animation industry. These include a lack of skilled workforce, poor quality animation production, low demand for Saudi animation, and few firms competing in the industry, leading to low overall capability.

This analysis also demonstrates that there are three main barriers that cause these characteristic features and prevent the Saudi animation industry from moving into its Growth stage. The first barrier is an absence of skills providers: only a few institutions have recently begun to offer training and education courses for the required skills relating to the animation industry (see Table 3 in section 4.1.2).

The second barrier is financial. In addition to the high costs required to establish firms within the animation industry, which include the costs of buying advanced computer hardware and rendering engines equipped with the latest professional software with updated licences and hiring qualified professionals, there is a high level of business risk. This is because there is only a small amount of demand for Saudi animation production, and thus, financial resources are limited. In addition, there is an absence of investment in animation production from either the government or private parties (see section 4.1.1).

The third barrier is the absence of distribution channels due to the weakness of the infrastructure for the media industry in general. For example, there is an absence of media marketplaces, and creative firms have difficulty reaching key buyers such as TV channels. In addition, there is an absence of organisations that support the animation industry, to the extent that this study identified only one organisation in the country that included supporting animation as one of its aims (see section 4.1.6.2), and other findings suggest that it does not contribute much to the industry.

These barriers have shaped the characteristic features of the Saudi animation industry at the current time. The absence of skills providers has resulted in a lack of skilled workforce and the production of poor quality animation, while the financial risks have limited firms' capabilities as well as hindering the establishment of new firms in the market. The absence of distribution channels also plays a role, alongside the poor quality of the product, in causing reduced demand for Saudi animation.

4.5.2 Discussion on the Emirates Animation Industry

By analysing the Emirates animation industry (see section 4.2), the current study has identified several characteristic features, which include the availability of trained workforce, good quality production, moderate demand, limited capability, and a good number of firms competing in the industry, at least compared to the Saudi animation industry. In spite the fact that the Emirates only entered the animation industry in the 2000s, it has seen rapid growth; the country now has about 23 animation firms clustered in Abu Dhabi and Dubai.

Nevertheless, the current study identified several barriers that cause these characteristic features and which may prevent progression of the industry to the Mature stage. The first barrier is that there is a relative shortage of skills providers. Currently, there are only ten institutions that offer full time animation programmes (see Table 4 in section 4.2.2), a relatively small number compared with those in the UK. This could be due to the fact that the animation industry in the Emirates only began to take off in the late 2000s (Al-Ghufli, 2010). However, in contrast to the Saudi case, these institutions have still managed to provide the local industry with a skilled workforce. In addition, compared to Egypt, the Emirates has managed to progress faster; in spite of entering the industry more than four decades after Egypt, both countries have ten institutions that provide animation courses.

The second barrier is the relative shortage of distribution channels. Although the Emirates has succeeded in establishing an excellent infrastructure for its Media industry, there is still a relative shortage of distribution channels that specialise in the animation industry. The current study found only two established festivals that mainly focus on the film industry, the Gulf Film Festival in Abu Dhabi and the Dubai Film Festival, and of these, only the latter festival has a subcategory for animated film. However, one festival was found to target animation films as its main focus, Animate Dubai, which was launched recently in 2016 (see section 4.2.2). In addition, one additional marketplace, The Big Entertainment Show, was found that has a subcategory for animation production. There are also a few organisations that support the creative industry, including the animation industry (see section 4.2.6). This support includes financial support, technical support, and training support. The role played by these organisations is more significant than that of similar bodies in Egypt,

as the Emirates organisations collaborate with international partners who have advanced experience.

The third barrier is a relative shortage of financial resources. According to the findings of this study, animation production in the Emirates is subject to only local and regional demand (see section 4.2.2). Compared with the international demand that a Mature industry such as the UK receives, the demand on Emirates production is therefore considered moderate. This moderate demand affects the financial resources of local firms, which restricts their capability. Although there is evidence that there is increasing local and regional demand for Emirates productions, lack of demand could still present an obstacle to them in terms of improving their production quality.

4.5.3 Discussion on Egypt's Animation industry

In terms of the findings from Egypt (see section 4.3), the current study shows that the animation industry in Egypt has similar features to those found in the Emirates animation industry. This is because both are in their Growth stage. However, the Egyptian industry is classified by this study as being in an established Growth stage due to it having reached its Growth stage nearly four decades before the Emirates; and, in conjunction with this assessment, the Emirates animation industry is classified as being an emerging Growth stage industry due to it having emerged only recently. The characteristic features of the Egyptian animation industry include the availability of trained workforce, good quality production, moderate demand, limited capabilities, and several firms competing in the industry. Although Egypt entered the animation

industry in the 1960s, its animators are still clustered in Cairo city, and the industry size remains relatively small, with around 18 animation studios in the country.

These characteristic features are the result of the particular barriers faced by the animation industry in Egypt, and it makes sense that the barriers found in Egypt are similar to those in the Emirates. The first barrier is the relative shortage of skills providers due to the limited number of institutions that offer full-time courses relating to animation. Although Egypt entered the animation industry four decades before the Emirates, the findings of this study show that it has only ten institutions that offer a full-time animation programme (see Table 5 in section 4.3.2), the same number as found in the Emirates. The number of animation programmes available has increased only gradually during the last two decades, and this number of higher education institutions is considered relatively small compared with the numbers found within the UK, which will be discussed in the next section. This could indicate that Egypt's animation industry growth is a slow gradual progress compared with the Emirates' faster growth progress.

The second barrier is the shortage of distribution channels due to infrastructure weakness. Although Egypt is considered the Hollywood of the Middle East due to its film industry's reputation (Alrimawi, 2014), there is still a shortage of distribution channels for the animation industry compared with the UK. According to the findings of the investigation of the animation industry in Egypt, there are five film festivals in the country, but none of these festivals has a sub-category for animation. One festival has been found that is targeted at animation films, which the Cairo International Animation Forum (see section 4.3.2). This festival is much larger and more

established than the one in the Emirates. Egypt also has a few organisations that support the creative industry in general (see section 4.3.6), with forms of support including financial support, technical support, and training support. These organisations work with local partners, which make them less effective than those in Emirates that work with international partners with more experience.

The third industry barrier is the relative shortage of financial resources, leading animation firms to have limited capabilities. Although the Egyptian animation industry has been considered the outsource hub for animation production in the region, recently it has faced competition from other Arab countries that entered the industry later, such as the Emirates and Jordan. This competition has reduced demand for Egyptian production. This moderate demand has led to a relative shortage of financial resources and, in a similar manner to the Emirates animation industry, the Egyptian industry is thereby restricted from improving its general quality to compete with animation firms in Mature industries.

4.5.4 Discussion on the UK Animation Industry

The findings from the UK animation industry analysis (see section 4.4) demonstrate that it has several specific characteristic features. These include excellent quality animation production; high international demand; large capability, with many firms competing in the industry, and high availability of trained workforce. In addition, the animation industry in the UK is large; there are about 600 animation firms across the country, generally located in several clusters including London, Bristol, and Manchester.

In contrast to the other studied countries, in the UK there is good availability of skills providers; about 53 higher education institutions offer animation and related programmes as full-time courses of study (Kenny & Broughton, 2011). This availability provides the industry with sufficient workers who have higher competence levels than those from the Saudi, Emirates, and Egyptian animation industries. In addition, the UK has several well-structured distribution channels for the animation industry. As mentioned earlier, in the UK there are about 32 animation festivals each year (animation festivals, 2017). In contrast to the Emirates and Egypt, where festivals only take place in the main cities, these festivals take place all across the UK. In addition, there are a variety of organisations that support the creative industry, including the animation industry (see section 4.4.6), and this support includes financial support, technical support, and training support. These organisations and festivals have accessible channels that facilitate animation firms reaching industry stakeholders and, alongside the excellent quality production of the animation industry in the UK, have resulted in increasing the demand for UK animation production. This high demand from local and international buyers provides the UK industry with sufficient financial resources to enable firms to maintain their capabilities and produce excellent quality work.

Although the UK animation industry has reached the Mature stage, the current study indicates that it still faces a barrier, which is the competition from cheaper competitors such as France and Canada, or Asian countries such as India and Korea. France and Canada have used tax regulations to reduce the costs of their animation production, while in the Asian countries, skilled workforce costs are lower (Kenny & Broughton, 2011). These cheaper competitors threaten UK animation, as some

international buyers prefer to save money. Some local producers in the UK have also started to outsource animation production processes to these countries. This barrier could move the UK into a Decline stage if it continues. However, the introduction of tax relief in 2013 has thus far enabled the industry to remain in its Mature stage (see section 4.4.7.6).

4.5.5 Conclusion of the Discussion

Based on the industry analysis of the studied countries, as outlined in the above subsections, the current research identified a different Condition Cycle for each stage of the animation industry life cycle. Each Condition Cycle describes the general characteristics of the animation industry in a particular stage. The term Condition arises from Porter's theories regarding industry lifecycles (see section 2.1.2.1), in which each industry stage is defined as having particular conditions. This thesis described the condition as a Cycle due to the fact that the particular conditions or characteristics have a direct impact on one another in a circular manner. Therefore, this research has chosen the term Condition Cycle to describe a system characterised by mutually reinforcing conditions.

In the Introduction stage, the analysis of the animation industry in Saudi Arabia (see section 4.5.1) reveals three main barriers that prevent the animation industry from moving into the Growth stage. The first barrier is an absence of skills providers where only a few institutions offer training and education courses that provide skills related to the animation industry. The second barrier that challenges the animation industry in the Introduction stage is financial. This is due to the high costs required to establish

firms within the animation industry, such as buying sufficient advanced computer hardware and rendering engines to run the latest professional software with updated licences, and the costs of hiring qualified professionals. These expenses naturally lead to high levels of business risk. The third barrier is that during the Introduction stage, there is an absence of distribution channels due to the weakness of the infrastructure. Further details on these barriers and the strategies that can be used to overcome each of them during the Introduction Stage will be presented later, in section 6.1.2.

These barriers shape the Introduction Condition Cycle, which is illustrated in Figure 29. This Condition Cycle has five characteristics: lack of trained workforce; poor quality animation productions; low demand; restricted capability; and few firms within the market. Framing this as an Introduction Condition Cycle, the absence of skills providers results in the lack of workforce and the poor quality, while the financial risk that results from firms' limited capabilities prevent the establishment of new firms in the market. The absence of distribution channels plays a role alongside poor quality in causing low demand for animation during the Introduction stage. These elements have direct correlations with one another, forming a continuous cycle. Therefore, changing some elements directly affects the other elements, also (see section 6.1.2 for more details on the strategies indicated in the Theoretical Model for use in the Introduction stage). In Figure Figure 29 below, the relationships between these barriers and the conditions of this stage are highlighted with arrows.

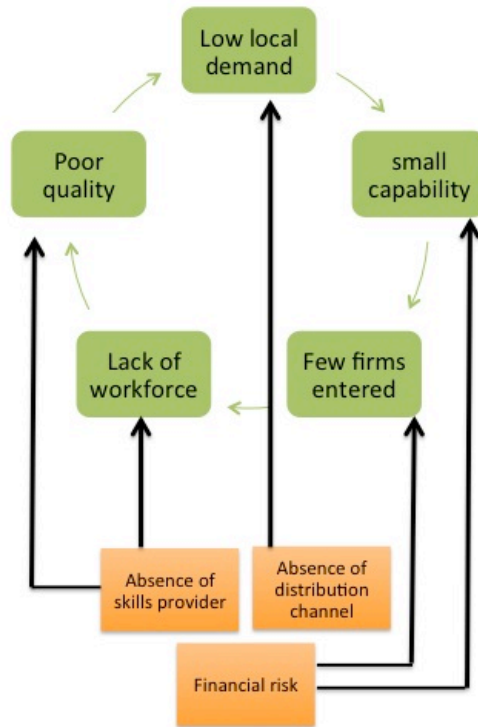


Figure 29: Introduction stage Barriers and Condition Cycle

In terms of the Growth stage, the Condition Cycle, as illustrated in **Figure 30**, is once more shaped by the industry barriers that arise in this stage. According to the findings from the Emirates and Egyptian industry (see section 4.5.2 and 4.5.3), the industry barriers that constrain movement from the Growth stage to the Maturity stage are similar to those that limit industries in the Introduction stage. However, the degree of these barriers and the scale of their impact changes, affecting the nature of the constraints. One of these barriers is the relative shortage of skills providers, in terms of both quantity and quality. A quantity shortage is generally due to a limited number of institutions offering full-time courses leading to animation degrees, while a quality shortage often arises due to the relative lack of experience within skills providers,

which provides the industry with a workforce that is less competent than that found in a Mature industry. In addition, the moderate levels of local demand found in a Growth stage industry do not encourage practitioners to develop their skills to the same extent that practitioners in a Mature industry must, due to the higher expectations of international demand. A further barrier is a shortage of distribution channels due to infrastructure weaknesses, but the final industry barrier is a general shortage of financial resources, leading animation entrepreneurs to have limited capability and preventing them from improving their product quality to compete with animation studios in Mature industries. These barriers shape the Growth Stage Condition Cycle, which includes the five following elements: a workforce with moderate competence, good quality production, moderate demand, limited capability, and moderate number of firms entering the industry. The relationships between particular barriers and conditions are shown in **Figure 30** by arrows. In a similar manner to the Introduction stage, in the Growth stage, the Conditions have direct correlations to each other, and therefore remain part of a continuous cycle. Thus, once again, any change in a given element will affect the other elements directly (see section 6.1.3 for more details on the strategies indicated in the theoretical model to assist the Growth stage industry in developing to a Mature stage).

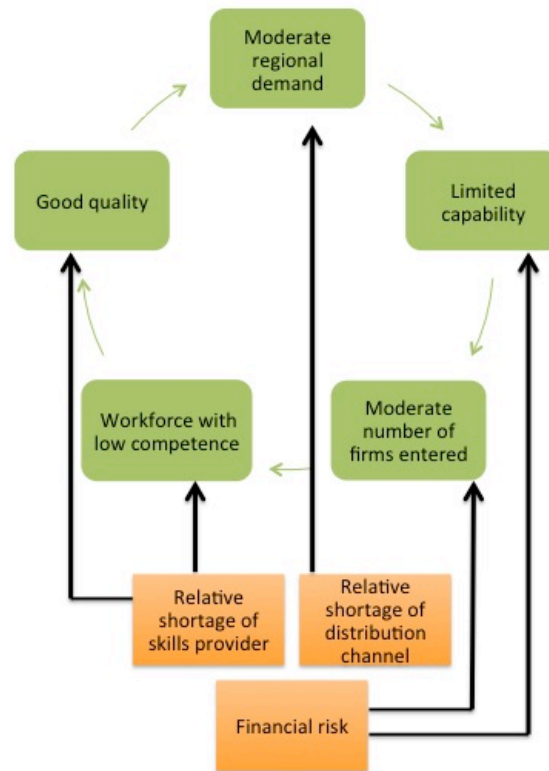


Figure 30: Growth stage Barriers and Condition Cycle

Regarding the Mature stage, the findings from the UK animation industry (see section 4.5.4) show that there are particular characteristics of the Mature industry that shape its Condition Cycle, as illustrated in Figure 31. This Condition Cycle has five elements: excellent quality; high international demand; large capability; many firms competing in the industry; and a workforce with high levels of competence. However, although the UK animation industry has reached a Mature stage, barriers to healthy progression exist that could lead the animation industry to move to the Decline stage. The main barrier is that the UK faces competition from cheaper competitors such as Asian countries, France and Canada. France and Canada have used tax regulation to reduce costs, while in Asian countries, general workforce costs are lower. These cheaper competitors have attracted a lot of business, as international buyers prefer to buy from them for cost reasons. In addition, some local producers from the UK have

started to commission and outsource animation production process to these countries. In Figure 31 below, the Condition Cycle can be seen to have reached its peak; it is now only constrained by reduced demand due to the competitors. However, these cheaper competitors create a threat to the entire Condition Cycle, particularly if they are of high competence.

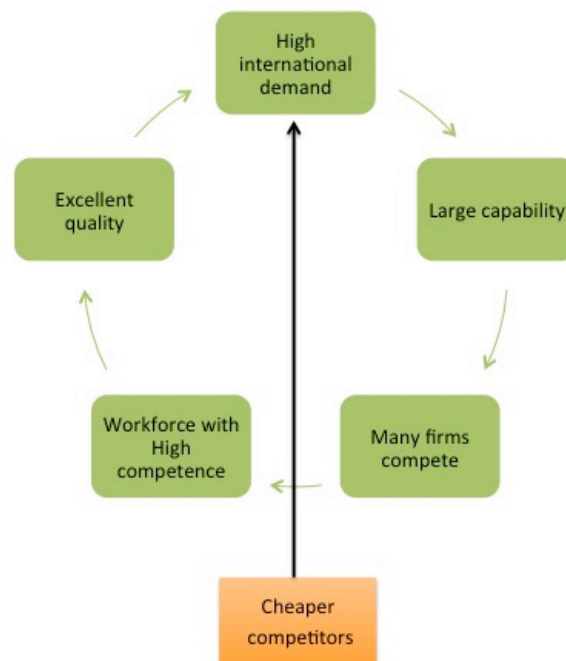


Figure 31: Mature stage Barrier and Condition Cycle

4.6 Summary

This chapter provided a holistic picture of the animation industry within Saudi Arabia and the multiple case study countries. An overview of the analysis for their level of animation industry was given, and it also traced the historical development of the animation industry within those countries. This analysis assists in the development of

an understanding of how the industries in the various countries studied have developed. A discussion of the findings arising from the analysis of the animation was also presented. This discussion identified the characteristic features for each country's industry stage, as well as discussing the barriers that act as obstacles to the development of the animation industry for each country. The identification of these characteristic features and barriers helps to provide a foundation for the development of the Theoretical Model by aiding an understanding of the conditions inherent in each stage of the animation industry life cycle. This understanding will be used as a guide for the researcher in terms of determining which strategies to apply in each stage. The strategies themselves will be extracted from the analysis of the research framework carried out in the next chapter.

5 Research Framework's factors Analysis, and Discussion

This chapter presents the results, an analysis of the findings, and a discussion of the outcomes of this research. In particular, the results presented here are focused on the four factors provided by the research framework. However, in this thesis, further results as presented in Chapter Four have become apparent in terms of an industry analysis of the animation industry in Saudi Arabia and the multiple case study countries of the United Arab Emirates, Egypt and the UK. The results presented in Chapter Four help to create a rounded picture of the animation industry position and history of its development in each of the studied countries, while the results in Chapter Five will lead more specifically to identifying the ways each of the factors defined by the research framework could assist future industry development.

This chapter has four main sections that correspond with the four factors of the research framework. Each factor will be analysed using thematic analysis (see section 3.6). Data to be analysed in this chapter were collected from several different sources, including document analysis, interviews and notes collected from observations made on study visits (see section 3.5). This chapter presents the second and third phases of the thematic analysis, which are data display and conclusions (see section 3.6). The data display phase, which required selecting codes. As discussed in chapter Three (see section 3.6), Codes are "*a label attached to a section of text to index it as relating to a theme or issue in the data which the researcher has identified as important to his or her interpretation*" (King, 2004, p257). In this thesis the coding process was accomplished using a deductive coding approach. These deductive codes were derived from previous theories and the literature review as discussed in Chapter Two.

Reviewing these theories and literature resulted in the development of a research framework that includes four factors that can be seen to encourage industry life cycle development. These four factors are Higher Education Institutions, Networks, Governments, and Locations. Issues that arise within these four factors include knowledge diffusion, developing workforces and entrepreneurs, increasing competition, and enhancing productivity. This thesis selected codes that indicated enhancement of those particular issues within the research framework factors. For each factor of the research framework, this chapter therefore tabulates the key codes, categories, and themes that arise from the data before discussing each theme separately. Finally, a discussion of the chapter findings will be presented to determine which factor is the most significant in terms of encouraging progression through the different stages of the animation industry life cycle.

5.1 Higher Education Institutions

This section will shed more light on the ways that higher education institutions assisted the development of the animation industry life cycles within the multiple case study countries. The current study triangulated the data collection tools to enhance the credibility of the data. The data collection tool that were used included interviews, documents analysis, and observations of the environments where animation courses take place. Moreover, the data sources were further triangulated. Thus, interviews with animation programme leaders, students within the animation programme and animation studio managers¹³ were conducted to access a range of different viewpoints. The document analysis used involved analysing official documents related to higher

¹³ Interview protocol in the appendix.

education, in particular, official websites for animation courses and course descriptions. Reviewing the literature and the related theories in Chapter Two, suggests that higher education is the provider of both a skilled workforce and entrepreneurs. As the availability of competent workforce and sufficient entrepreneurs are important for developing the animation industry (Muthalib, 2007), this study seeks to find out how higher education institutions accomplished their role in the different stages of the industry life cycle. The rationale for this is to determine how best to employ higher education in the Theoretical Model. To achieve that, this study selected codes that indicated support for the preparation of a competent workforce and entrepreneurial development. Table 6 shows the codes, categories and themes that emerged from the collected data with regard to higher education institutions:

Codes	Category	Themes
<i>Employability; engage in live-projects; collaborator companies; finish a project for these companies; work in team, play different roles; successful internship program; students go out and work with the industry; work experience; big speakers; deliver talks and workshops; we invite a professional</i>	<ul style="list-style-type: none"> • Industry engagement education 	Education approaches
<i>well-prepared to succeed in entering the competitive market; incorporated entrepreneur; providing graduate whose are becoming the industry; workshops in the media festival; talks about entrepreneur; workshops that run by international and local expertise</i>	<ul style="list-style-type: none"> • Entrepreneur education 	
<i>Expertise; award winning; long experience in the industry; combined both teaching and filmmaking; highly experienced professionals</i>	<ul style="list-style-type: none"> • Teaching staff 	Education environments
<i>Industry standard; latest cutting edge; most professional hardware</i>	<ul style="list-style-type: none"> • Education facilities 	

Table 6: Codes, categories and themes that emerged from an analysis of higher education institutions

These codes were categorised into four categories: industry engagement education, entrepreneurship education, teaching staff, and facilities. These four categories combined to form two key themes within the examination of the higher education institutions. These key themes, education approach and education environment, will be presented separately in the following sections with a discussion of each category based on analysing the codes, and quotations provided where appropriate to demonstrate where codes have been extracted from.

5.1.1 Education Approach

Education approach is the first theme that was identified within the higher education data. As mentioned earlier, this theme is comprised of two categories, industry engagement education and entrepreneurship education. Each category will be discussed below based on an analysis of the codes within it.

5.1.1.1 Industry Engagement Education

The first category in this theme as extracted from the findings is industry engagement education. This research uses the term industry engagement education to refer to codes that indicate links between students and the animation industry during the course of their higher education studies. These codes were selected because such links between students and the industry provides students with the experience they require to polish their employment skills. Accordingly, they can approach their first jobs more competently. The study findings led to several codes emerging signposting the use of different methods of industry engagement education within the case studies.

These codes are listed in **Table 6** under the industry engagement category. The codes in this category will be analysed below, with sample quotations.

The codes *employability*, *work experience*, and *studio based work* were identified in the following quotation:

*“We focus on **employability**...we tried to deliver a programme that makes a transition from education to employment... all the techniques, all the methods and all the process are exactly the ones that they will get in the industry...**work experience** in the industry is a very important part of what we do here, we expect our students to engage in some kind of **work experience** at level one, level two and level three...so, we do not wait till level three after people get involved in the external project or some kind of crew based work or **studio based work**, we do that right from the start from day one” (Animation Programme leader at UWE, 2014).*

This quotation demonstrates how important UK course leaders considered engaging animation students with the industry during their study to be. This response stresses early engagement with industry, with students expected to obtain work experience from the start of their course.

Further codes that reflect industry engagement include *collaborator companies*, *finish a project for these companies*, and *student plays different roles*, which were taken from the following response:

*“We have a list of **collaborator companies** including Media Company, advertisement agencies and charities, our students are required to **finish a***

project for these companies, so students work in teams and each time a different student plays different roles such as a director, a storyboard designer or an animator” (Salford University Animation programme leader, 2013).

This response shows that students are involved in projects and get the benefit of practicing different roles that provide them with real experience as employees during their studies. For example, some will direct while others play the roles of designers or scenario writers.

Further relevant codes, *to engage in live projects; a production meeting; and we made a project* that were extracted from this quotation:

“All of our students are expect to engage in live projects... all kind of different clients...every year we have a range of live project... we had a production meeting last week with BBC and students uploaded their work yesterday for the producer to look at...a couples of years ago we made a project called Gulp with Nokia and Aardman - it was the world’s largest animation” (animation programme leader at UWE, 2014).

The above quotations shows that using industry projects, or as they are known in the UK “live briefs”, gives students opportunities to work directly with the industry including key animation stakeholders such as the BBC and Aardman.

The codes *internship* and *go out and work with the industry* were extracted from this response:

*“We have a very successful **internship** program where a student **go out and work with the industry**”* (animation course leader at Zayed University, 2013).

The above quotation shows that advanced level animation course students are encouraged to develop more employment skills. Animation courses encourage student to take placements or internships in their final years to practice their practical and employment skills in a real work environment, enabling them to better engage with the industry.

Similar codes such as ***work experience, internship, and lead to employment*** emerged from the following quotation:

*“Our students have the opportunity to engage in **work experience** in industry visit, **internship** and an employment. We very often asked acutely if we got any student currently studying if they free to acutely work on production stuff. I am very keen on that, that students will earn cash while they learning...so, we interested in this because it **lead to employment**”* (course leader at UWE, 2014).

This quotation indicates that engaging students with the industry through internships has attracted industry firms to start asking for students to work with them.

Likewise, the next quotation also shows that the student’s chances of getting a job will increase after taking on an internship:

“Most of our student who go to internship, 90% or more they offered a job”
(animation course leader at Zayed University, 2013)

To facilitate internships, animation courses collaborate with particular media companies that welcome students undertaking responsibilities as a part of the creative team. In fact, the responders also noted that universities always ask for feedback from students about the agency they work with during the internship, as illustrated in this quotation:

“We make sure that it is the right place for student to work, there are some certain companies where our students have gone in the past, and they came back and say: they did not gave us any work, then we remove these companies from the list” (course leader at Zayed University, 2013).

Interestingly, the findings demonstrate that students even have the opportunity to take up internships with key organisations within the animation industry such as CBBC, CBeebies, and CITV in the UK case study, and Cartoon Network in the Emirates case study. Interviews with students enrolled on animation courses who have undertaken internships in popular animation studios exposed the extent to which they found internships useful for preparing them in terms of employability:

“It is really great place to learn and get work experiences in a real animation studio. Because working with the studio team makes me more confident when I will apply for job as it will add to my CV” (student at UWE, 2014).

While another student who agreed with the previous response pointed out

“I chose to study animation in the Cartoon Network Animation Academy to get the opportunity to practice what I learned in their studio as it assists me to

prepare for a work environment” (student at Cartoon Network Animation Academy, 2013).

Further codes that indicate students engaging with the industry include *big speakers*, *people from the industry*, and *deliver talks and workshop* as shown in the following quotation:

“We attracted some big speakers...we have people from the industry come and deliver talks and workshops...we do have people come to talk about variety of different aspects. Not necessarily just about animation; they speak about lots of things” (animation programme leader at Salford University, 2014).

Likewise, similar codes that include *we invite a professional* and *talk to our students about the experience* emerged from this quotation:

"Each year we invite a professional from the animation industry and related field to talk to our students about the experience that they have and their journey from the beginning and how they achieved their position as students always show interest in ask them questions and take important advices from them" (animation programme leader at Zayed University in Dubai, 2013).

The following response includes similar codes including *hosting professionals* and *to talk about the industry*:

"We try to engage students with the animation industry by hosting professionals who worked with the industry to talk about the industry and their experience ... this collaboration is very important because students get benefit as the guest speakers bring updated, realistic information about

the animation industry beside drawing a perspective of what they will face in the future. On other word, guest speakers covered area that course not covered" (Animation programme leader at the Higher Institution of Cinema in Cairo, 2013).

Further codes extracted from the next quotation include ***work with the industry stakeholders*** and ***host a professional as a guest speaker***:

*"Collaboration is very important between us and the animation industry stakeholders as they represent the industry in which they are better in communicate some issues than we do it...our academy located in the Abu Dhabi Media zone, which gives us a great chance to **work with the industry stakeholders** as each month we **host a professional as a guest speaker**. Our guests could be from local industry or they could be from different countries to allow our student capture a huge picture about the animation industry" (head lecturer at Cartoon Network Animation Academy, 2013).*

The above quotations indicate that using industry guest speakers adds value to the courses.

An analysis of the findings presented under the industry engagement education category demonstrates that the multiple case study countries employ different approaches to engaging students with the industry. These methods include co-projects; internships or placements; and hosting industry professionals.

Co-projects allow students to test their abilities in terms of dealing with different clients' requirements, which assists them with gaining employee skills in a friendly environment at their university, a gentle first step to introduce them to work experience. Skills such as teamwork, time management, and dealing with clients are developed, as students have meetings and discuss the project with a company representative during term time. This helps provide students with the confidence to take the next steps when they have to undertake internships or placements outside of the university campus. A study by Martin and Leberman (2005) suggested that it is important to introduce students to work experience while they are on campus in this way prior to starting their firm-based experience on placements.

The second method identified through this research is internships. This practice provides students with realistic experience as an employee, as it requires students to work in industry firms, such as animation or creative studios, as a member of the firm's team. This definitely helps polish students' skills and prepares them for employment; the findings also demonstrated that companies where students had undertaken internships were more likely to employ these students after they graduated. This finding is consistent with findings of previous studies on the value of internship education as conducted by Bramwell et al (2008), which showed that Waterloo University in Canada played an important role in training a major proportion of the labour force in the Waterloo region by adopting a strategy that allowed students to gain experience in industry as part of their courses. The findings of the current research show that, to ensure students benefit effectively from internships, it is important to determine the tasks required by the collaborative firms. Similarly, research by Martin and Hughes (2009) reported that it is essential to clarify

with firms the objectives expected for students before the placement begins in order to allow those students to apply what they learn in the classroom and achieve competence in terms of their technical and professional skills.

Further methods emerging from the findings of this study show students engaging with the animation industry by encountering industry professionals invited to act as guest lecturers to deliver talks or workshops in informal environments at the university. The responses generally pointed that key figures such as representatives from the leading national animation studios are the most common guests due to their positions in their field, including Aardman studios in the UK, Fnar Production in UAE, and Cairo Cartoon in Egypt. Students have the opportunity to ask these guests about several aspects relating to the industry or the guest’s personal experience. This practice adds value to the courses as it widens students’ knowledge and horizons in the animation field. In addition, it could assist students to practice networking with an industry professional.

The degree of engagement with the animation industry varies between different levels of the industry life cycle. Table 7 summarises the key differences between the multiple case study countries in terms of the degree of industry engagement.

Case Study	UK	Egypt	Emirates
Industry Engagement Approach			
Co project	✓	×	×
Internship/ placement	✓	×	✓
Industry guest lecturer	✓	✓	✓

Table 7: Key Differences between multiple case study countries in terms of Industry Engagement Approaches

At the Mature industry stage, represented by the UK, the degree of engagement is more intense because higher education institutions adopt several methods of engagement including co-projects, placements/internships, and hosting industry speakers. This intense engagement positively affects the outcomes of the higher education institutions at the UK, which justifies the high reputation that UK universities have for animation courses. However, in the Growth stage, the degree of engagement with the industry is less intense. Yet, in Egypt and the Emirates, both of which have Growth stage animation industries, the degree of engagement also differs. Although higher education institutions in Egypt offered animation courses three decades before those in the Emirates, they offer less industry engagement than those in the Emirates. According to the findings of this study, the higher education institutions in Egypt engage with industry through invited speakers only, while the Emirates does so through internships/ placements and industry speakers. This may explain why the Emirates has succeeded in establishing a reputation as an excellent destination for studying animation within Arab countries so quickly. Its engagement with the industry is more intensive than that found in Egypt, which provides students with better quality knowledge and experience. This degree of engagement affects the quality of workforce skills that students acquire during their studies, which may have assisted the animation industry in the Emirates with showing faster progress than that in Egypt.

In light of the above findings, the current study demonstrates that the higher education institutions in the multiple case studies countries do all adopt industry engagement during the delivery of animation courses. This approach provides animation students with industry experience during their study, and hence these students are more

qualified to work competently with the industry after they graduate than those in Saudi Arabia who have only subject knowledge in animation (see section 4.1.2). Therefore, this strategy will be added to the Theoretical Model at the Introduction stage to assist with the preparation of a competent workforce (see section 6.1.2).

5.1.1.2 Entrepreneur Education

The second category that formed teaching approach theme is entrepreneur education. This research uses the term entrepreneurship education to refer to codes that imply the provision of entrepreneurship knowledge to students. The study selects these codes because having entrepreneurial knowledge facilitates students to setting-up their own businesses. Accordingly, it will affect the development of the animation industry life cycle by encouraging more firms to be established to compete in the animation market. Table 6 in the beginning of the higher education section shows these codes that make up the entrepreneurship education approach.

Codes including *tailored our curriculum* and *well-prepared to succeed in entering* were extracted from the following quotation:

“We tailored our curriculum to ensure that students well-prepared to succeed in entering the competitive market” (animation programme leader at Zayed University, 2013).

This quotation demonstrates that animation programme modules have been designed to assist with the preparation of the student to enter the animation market.

The more specific code *incorporated entrepreneur* was extracted from this response:

*“We **incorporated entrepreneur** skills in the animation production module, which includes thing such schedule project and other kind of thing that cover in this module”* (animation programme leader at Salford University, 2014).

This quotation shows that providing knowledge related to entrepreneurship is part of the module content.

A further relevant code is *providing graduate whose are becoming the industry*, which emerged from the response below:

*“Some of companies that offering work experience did not exist certain years ago. Where they come from! They come from here, we are not only providing graduate for the industry, we **providing graduate whose are becoming the industry**”* (animation programme leader at UWE, 2014).

This demonstrates that most of the current entrepreneurs are former students, which indicate that the animation course succeeded in preparing students to enter the market.

Further relevant codes, including *talks about entrepreneur, about being freelancer; about where can you set with the industry;* and *about the pipelines* have been taken from this quotation:

*“Through workshops in the media festival that runs by the university they have **talks about entrepreneur; about being freelancer; about where can you set with the industry; about the pipelines and more about the wide picture**”* (animation programme leader at Salford University, 2013).

This quotation shows that students are provided with entrepreneurial knowledge through non-credit activities such as workshops and talks during an annual event at the university. These workshops and talks inform students about the essential requirements for entering the market as a freelancer or joining the industry pipeline.

Similarly, the code ***discuss issues related to being freelancers*** was extracted from the following response:

*“The college arrange different workshops that run by international and local expertise as it take place on the college campus where students have the opportunity to **discuss issues related to being freelancers**”* (animation programme leader at the Higher Institution of Cinema at Cairo, 2013).

Some responses demonstrated that providing entrepreneurship workshops was not only the preserve of the animation courses; the Student Union also supported the teaching process in some cases through offering several workshops targeted at students within creative courses, such as animation, as illustrated in this quotation:

“The student union organized workshops and calling industry people. These workshops and activities aim to empower students to work

successfully as leaders in the world of creative industry and establish themselves, so that students can start up their own businesses”

(animation programme leader at Zayed University, 2013).

An analysis of the findings presented above demonstrates that adopting entrepreneurial education has a positive impact on the development of the animation industry. This approach succeeds in preparing students to start business in animation industry. In contrast, higher education in Saudi Arabia neglects the preparation of entrepreneurs in creative courses where animation are taught (see section 4.1.2). This result is in agreement with Smith and Beasley’s (2011) study, which showed that students who enrolled in creative industry courses that included entrepreneurship education were more likely to set up their own businesses. An explanation of this is that entrepreneurship education plays a role in providing students with the important skills and knowledge they need to set up their businesses. Accordingly, adopting this approach should facilitate industry development as the students gain confidence due to developing the in-depth background knowledge that they build up during their studies. Thus, the number of entrepreneurs competing in the animation market will increase, which will positively affect the development of the animation industry life cycle. This study identifies two methods that have been used to provide students with entrepreneurial knowledge. The first method is incorporating entrepreneur knowledge into the course model, which refers to course whose aims have been tailored to provide students with entrepreneurial skills during their studies. According to Garcia & Masigan (2001), course content that includes business concepts within the curriculum being taught to students in film industry majors is an enabling factor that assists graduates in establishing their own businesses. Thus, it can be argued that

adopting the methods observed within the multiple case study countries assists them in providing their local animation industry with entrepreneurs. The second method employed by the multiple case study countries to provide students with entrepreneurial knowledge is the addition of non-credit activities such as workshops and talks delivered by professionals. The findings show that this method adds value to the course as it enables student to understand how to enter the animation market and start their businesses from the point of view of experienced professionals.

In a similar manner to the industry engagement approaches, the degree of intensity in entrepreneurship education varies between the multiple case study countries. Table 8, summarises the key differences between the multiple case study countries in terms of their degree of application of entrepreneurship education.

Case study	UK	Egypt	Emirates
Entrepreneurship methods			
Incorporated entrepreneurship skills within course modules	✓	×	✓
Non-credit activities	✓	✓	✓

Table 8: Key Differences between Multiple Case Study Countries in Terms of the Degree of Applying Entrepreneurship Education Methods.

At the Mature stage, represented by the UK, the findings demonstrate that the degree of intensity of entrepreneurship education is greater as the higher education institutions apply both methods. In a similar manner to the UK, the Emirates' higher education institutions apply both methods for entrepreneurship education. However, while Egypt started its Growth stage well before the Emirates, its entrepreneurship education is less intense as it applies non-credit methods only. Again, this may indicate why the Emirates' animation industry life cycle has evolved faster than Egypt's. When students are not prepared sufficiently to enter the market as entrepreneurs, there is a lack of confidence that impedes entrepreneurship. According

to the findings from Saudi Arabia, it is clear that there is an absence of entrepreneurship education in animation courses and creative subjects such as graphic design, as they focus only on basic practical skills as discussed early in chapter 4 (see section 4.1.2). This result is in agreement with Garavan and O'Conneide's (1994) study, which confirms the association between different entrepreneurship education styles; they suggest that it is more effective to combine both methods, offering non-credit activities along with incorporating entrepreneurship skills within course modules. Therefore, this study will introduce a mixed entrepreneurship education strategy into the Theoretical Model for the Introduction stage (see section 6.1.2), because during the Introduction stage, the number of firms competing is small. Thus, this strategy will assist in improving the provision of animation entrepreneurs.

5.1.2 Education Environment

The education environment is the second theme that emerged from the research on higher education institutions. In particular, two categories form the education environment theme, Industry Expertise Teaching Staff and Industry Standard Education Facilities.

5.1.2.1 Teaching Staff

In terms of teaching staff, which is the first category in the education environment theme, there are several different codes that signify recruiting industry expertise as a teaching staff, which were listed in Table 6. These codes were selected because it indicate the importance of having staff with industry experience to provide students

with updating knowledge and competence skills as indicated in the following quotations:

*“The **expertise** of our staff all drives from experience with the industry... our staff have **industry experience** and subject experience”*
(animation programme leader at UWE, 2014).

*“All of our academic teams are **award winning**... lots of **industry links**”*
(animation programme leader at Middlesex university, 2014).

*“The course is delivered by highly **experienced professionals** who have **long experience** in the industry as they worked with the key international brands such as Disney, Hanna-Barbera and Warner Bros”* (Head Lecturer, Cartoon Network Animation Academy at Abu Dhabi, 2013),

*“Some of our staff member have **combined both teaching and filmmaking**”* (animation programme leader at The Higher Institution of Cinema at Cairo, 2013).

Moreover, on reviewing the official website for the selected institutions, further evidence emerged that higher education institutions have recruited staff with industry expertise to teach. This is clearly illustrated in the following quotation,

*“Our **BAFTA winning** academic team are all working professionally and bring to the course **specialised expertise** in short and long form animated filmmaking, commercials, TV series and motion graphics”*
(Middlesex University, 2015).

*“The Cartoon Network Animation Academy has highly **experienced professionals** delivering their courses” (Cartoon Network Animation Academy at Abu Dhabi, 2015).*

Students who were asked about their reasons for selecting to study on these courses also emphasised the teaching staff, as illustrated in these quotations:

*“The staff here have **industry links**” (student from Middlesex university).*

*“The higher institution of cinema is the best place in Egypt to study animation. Most of the teaching staff are **pioneers in animation** and have **strong experience**” (student from Egypt).*

*“Instead of traveling to America to study I came from Lebanon to study here in Abu Dhabi at Cartoon Network Animation Academy because it brought the **international experience** here to us” (student from Cartoon Network Animation Academy in Abu Dhabi).*

*“One of my dreams was to study animation in America and now I am learning from a **professional who was working in Walt Disney films**” (student from Cartoon Network Animation Academy in Abu Dhabi).*

*“Although my parent lives in Sharjah city I preferred to study here in Abu Dhabi; after I saw the staff profile I knew that it will be so amazing to be taught by **people who made those animation film** that we all loved it” (student from Cartoon Network Animation Academy in Abu Dhabi).*

An analysis of the findings within the teaching staff category demonstrates that recruiting industry professionals to teach in animation programmes is likely to have

an impact on the development of highly-skilled graduates. This because those teaching staff who also work in the animation industry as a directors, producers, or animators, combine industry experience with subject knowledge. This combination of industry experience and subject knowledge provides students with additional competency-based skills, as industry experts have the highest skills and updated knowledge of animation due to their occupational experience. Attwell and Brown (2001) found that in the education field, there is an emphasis on recruiting teaching staff with occupational experience in order to ensure that students are provided with competency-based skills, which is in good agreement with the results of the present study. Improved availability of highly-skilled graduates for the future workforce will affect the development of the animation industry life cycle.

In addition, the findings demonstrate that recruiting industry professionals to deliver an animation programme attracts students to enrol on such animation courses to get the benefit of being taught by experts. Moreover, the current study demonstrates that recruiting experts with international reputations for their experience has greater impact than recruiting local expertise. This can be seen from the differences between the multiple case study countries as summarised in Table 9.

Staff	Case Study	UK	Egypt	Emirates
Industry professionals with international experience		✓	✗	✓
Industry professionals with local experience		✓	✓	✓

Table 9: Key Differences between Multiple Case Study Countries in Terms of Teaching Staff

For example, Middlesex University in the UK has BAFTA winning teaching staff members whose have directed and produced a variety of TV commercials and animation series. Being taught by an expert who has won an international award

impacts on the students' knowledge and skills, which in turn affects their potential and capability for work at a higher level of competency after graduation. Likewise, the Emirates, which has an emerging Growth stage industry, has leapfrogged over its competition by recruiting teaching staff with international experience from Mature animation industries. For instance, the Cartoon Network Animation Academy in Abu Dhabi and Zayed University in Dubai have teaching staff with experience working in Mature animation industries such the UK, the USA, and Australia, as well as experience with key brands such as Disney. However, in Egypt, the higher education institutions have a number of teaching staff that combine subject knowledge and local industry employment. Although Egypt started its animation industry a long time before the Emirates, recruiting international industry expertise has assisted the UAE in becoming a competitor for Egypt among Arab countries in a short space of time. Nevertheless, in Saudi higher education, academic staff have no industry experience in animation or filmmaking as the focus is on recruiting staff that have higher education qualifications such as Master and PhD with teaching experience. This absence of industry experience affects the preparation of students as a competent workforce.

5.1.2.2 Facilities

Regarding the second category under the education environment theme, which is facilities, direct observation utilized during study visits identified two codes. These are *capacity* and *industry standard facilities*. These codes are listed in Table 6.

Observations suggest that the visited higher education institutions have different capacities. The UK institutions have more capacity than those in the Emirates and Egypt, which is unsurprising in a Mature industry. In the UK, each class has twenty to twenty-five computers, allowing each student to use them individually. In addition, the universities provide students with cutting-edge software for their own laptops. Nevertheless, the capacity in the UAE is better than in Egypt: the Emirates' classes have between fifteen to twenty computers with animation software. While the site visits for Egypt were cancelled due to political crises in Egypt, the animation programme leader in the Higher Institution of Cinema has informed the author that they only have a capacity of eight students per term (interview with animation programme leader, 2014). She teaches animation modelling in a number of institutions in Cairo city as well as being the programme leader for the animation programme in the Higher Institution of Cinema and she pointed out that the capacity for special equipment is very small in all of the institutions where she teaches, requiring some students to bring their own laptops during term time to practice on due to the small capacity of the computer labs.

In terms of *industry standard facilities*, findings from the UK demonstrate that classrooms within the visited institutions have industry-standard computer suites with the latest professional creative software. Each classroom has a projector, smart board, and a flat screen that is connected to the tutor's computer, which facilitates communication with all students at the same time. In addition, there are additional editing studios for sound recording that are also provided with cutting edge suites of software. Further, there are specialised studios for stop motion animation that feature several rooms. In these, each studio is provided with a desk that has a rostrum camera

connected to a computer to enable students to edit and manage their stop motion project directly. There are separate labs for metal and wood to allow modeling of the armatures and puppets that students use to make stop motion animation. This code was also extracted from the following quotations:

*“All of our kit, all of our studio are setup with **industry standard** software and hardware. That is really important. Again, as I say, we try to make a transition between education and employment as small as possible so, you will see stop frame animation studio; CG animation studio; 2D classical studio and a digital studio...it is very important to learn all those practical skills”* animation programme leader at UWE, 2014).

*“We have **professional studios** amazing facilities all equipment and software is **industry-standard**”* (animation programme leader at Middlesex university, 2014).

Findings from direct observation during a study visit to the Emirates demonstrate quite similar results to those obtained from visiting the UK. However, the focus within Emirates facilities is on CG animation, and the classrooms are equipped with high-standard computer suites with professional software and hardware. Each class has smart board and projector as well as an editing studio. This evidence is captured in these quotations:

*“Our students are taught to use **the latest cutting edge** software and hardware”* (course leader at Zayed University, 2013).

*“We focus **on quality** more than quantity each student has the chance to use the most **professional hardware** including touch screen as well as creative software... students have access to use editing studio shared with the other courses in the academy”* (head of academic development and operations at Tadreeb, 2013).

Although a study visit to Egypt was not possible, interviewees from Egypt noted that there is an absence of high-standard facilities within its animation courses.

This is captured within the following quotation:

*“Our facilities are **very poor and old fashioned**, it is better to not see it. I hope we can have support to renew it. However, in this institution we have facility for the different animation methods including 2D cell and CG, 3D CG and clay stop motion”* (animation programme leader at the higher Institution of Cinema at Cairo, 2013).

This portrayal in a quotation by a studio manager who combined teaching animation in higher education with animation filmmaking agrees with the previous viewpoint:

*“The facilities that are used to deliver animation course are very **old fashioned** comparing with what is really used this time for the industry”* (studio manager, 2012).

That quotation is supported from the viewpoint of another interviewed animator, who believes that equipping the animation course with high standard facilities would have a positive impact on the student experience as well. As the response indicates, if

students are well trained to use the cutting edge equipment, it will increase their chances of getting suitable jobs.

*“Unfortunately, in the college we used an **old-fashioned** technique and software. Therefore, I need to be well trained on the latest software to apply for jobs with the market” (animator from Egypt, 2013).*

An analysis of findings under the facilities category demonstrates that the quality and quantity of facilities that are used to deliver animation courses differ between the multiple case study countries. The above discussed findings show that the UK and Emirates have animation courses with large capacity and industry standard equipment. However, both Egypt and Saudi universities have shortages, where there is only a small capacity and students are taught using old equipment, which seems to affect the production of a competent workforce. This is because it provides students with additional knowledge and skills to use cutting edge equipment similar to that which they will be required to use in the industry. Accordingly, these students would be more competent than those students who are not taught in advanced facilities. This result corroborates the ideas of Abdulghani et al (2014), which suggested that student performance is better with adequate facilities. This is because using excellent facilities, including a variety of advanced software and hardware, will provide students with knowledge and skills that increase their potential and capability.

Thus, it can be argued that the facilities that the animation courses are taught with will affect the development of the animation industry life cycle to some extent. Table 10 summarises the key differences and similarities between the multiple case study countries in terms of facilities.

Case Study	UK	Egypt	Emirates
Facilities			
Large capacity	✓	✗	✓
Industry standard	✓	✗	✓

Table 10: Key Differences between the Multiple Case Study Countries in Terms of Facilities

Using large capacity and high standard facilities for delivering animation courses enhances students' capabilities and potential. Notwithstanding this, the use of self-learning resources such as online tutorials and instructors' books can assist students and graduates with becoming familiar with the latest equipment. In addition, animation studios usually offer training for new candidates to improve their skills with industry standard facilities. It can therefore be assumed that the higher standard facilities that are used to deliver the animation courses are less important than teaching staff, a result which is in line with those of previous studies by Owoeye and Yara (2011) that show that the absence of certain additional educational facilities did not have a significant effect on the performance of students.

5.2 Networks

This section presents an analysis of the results of examining the impact of network factors. It aims to identify how networks within the multiple case study countries have assisted in the development of their animation industries. The findings of this section will be employed in the development of the theoretical model in the next chapter. The data in this section were collected using interviews with studio managers and animators and document analysis, which involved analysing the official websites for network organisations within the animation industry. Based on the review of the literature and the related theories presented in Chapter Two, networks appear to

contribute to industry development. In order to identify how networks contribute to the different stages of the animation life cycle, codes that indicate how the animation industry gains advantages from networks were selected. Table 11 below illustrates the codes, categories, and themes that emerged from an examination of the networks factor.

Code	Category	Theme
<i>run a business; promote your business; facilitated my entry; and open the door; to promote my business for different clients; to deal with a great number; introduced to many companies</i>	<ul style="list-style-type: none"> • Promotion channel for new entry and established firms 	Network functions
<i>gained an overview; exchange information; main resource for gaining new knowledge; useful channel to increase your knowledge; will know what happens in the animation industry</i>	<ul style="list-style-type: none"> • Learning resource 	
<i>meet once a month, others, such as Festivus meet 3-4 times a year; hold a monthly networking meeting and we meet up regularly, but informally; we have a monthly meeting; we meet several times every year</i>	<ul style="list-style-type: none"> • Face to face meetings 	Network activities
<i>has a chatroom where animators can meet</i>	<ul style="list-style-type: none"> • Online meetings 	

Table 11: Codes, categories, and themes that emerged from the networks factor

As shown in the table, these codes were categorised into four category. Then themes were defined, comprised of two categories each. These themes are network functions and network activities, and these two themes should be considered when developing a strategy to improve the animation industry. In the following sections, each theme will be discussed to explain how it influences different life cycle stages.

5.2.1 Network functions

The first theme, network functions, is formed from two categories; the first category is Promotional Channels, while the second category is Learning Resources. Each category is analysed separately below.

5.2.1.1 Promotional channels

This category refers to codes that indicate the use of networks as a promotional channel for firms and individuals who are competing within the animation industry. The findings show several different codes that signpost the use of networks as promotion and marketing channels (See Table 11). These codes were extracted from the following quotations:

*“You cannot **run a business** without having a network. From all sorts of levels. From mentoring, to find staff, you need to know and meet the right people, the single most important thing to **run a business** is having a good connection and a good network”* (studio manager from London, 2013).

*“Having network is very useful for any entrepreneur. Because to run a business you must have a good network with other people in the market to know how **to compete** them and how **to promote your business**”* (studio manager from Bristol, 2013).

The two responses above show that networks are a fundamental tool for establishing and maintaining businesses in the animation market.

A very similar opinion also occurred in the following responses:

*“The benefit that I found in having network is **to promote my business** for different clients”* (studio manager from London, 2013).

*“Networking **facilitated my entry** to this market”* (studio manager from Cairo, 2013).

*“As a pioneer in animation, networking has **opened the door** for me to cofound our animation studio” (studio manager from Dubai, 2013).*

These above quotations show that networking plays a considerable role in assisting the respondents’ entry to the animation market.

Similarly, the following responses reflect how networks are used as a promotional channel:

*“Being a member of Dubai media city networks assisted us **to deal with a great number** of different clients from the media city” (studio manager from Dubai, 2013),*

*“I get **introduced to many companies** from different regions that who later become one of our clients” (studio manager from Cairo, 2013).*

*“There is definitely a lot of opportunity ... the most prominent is getting **involved in international production**” (Blink studio manager, 2013).*

These quotations show that networks enable entrepreneurs to gain additional clients.

Moreover, it demonstrates that networks also assist those studios that wish to work with international partners, which indicates that networks help them to increase their scale of clients:

An analysis of all the above codes demonstrates that networks are an essential marketing requirement for both new entrants and established entrants. In terms of the new entrants, the current study reveals that having networks with existing firms and individuals from the animation industry assist their

members with establishing and setting up their animation businesses. This finding is consistent with a study by Aldrich (1987), which revealed that social networks have an impact on business establishment and entrepreneurship. This result may be explained by the fact that new entrants have high levels of risk due to uncertainty and low levels of financial capital. Thus, networks enable them to access different resources efficiently and with lower risk. Similarly, this result corroborates the ideas of Casson and Giusta (2007), which suggested that networks help to overcome deficiencies that new entrants may face during the establishment of their businesses.

As mentioned earlier, networks are not only used as a promotion channel for new entrants but also to support established firms. The findings also indicate that joining networks increases the scale of clients for established firms as well as identifying partners for co-production or outsource providers. This leads to an increase in the demand for their work, which in turn affects the development of the industry life cycle. Previous studies by Morawetz (2008) and Cole (2008) found that firms used networks to build trust and connect with potential co-production partners. However, their studies demonstrated only that this was significant within the more Mature stages of the animation industry, as they focused on the European animation industry. It is therefore interesting to note that the current study demonstrates that even at the Growth stage, as represented by the Emirates case, networking with international stakeholders from a Mature industry creates opportunities for partnership and co-production. This collaboration between Growth and Mature industries is highly likely to increase the demand scale for the Growth industry, which will influence the development of the animation industry life cycle. An example of this is the

networking between Blink Studio, an animation studio based in Abu Dhabi, and the 3Line Media animation studio based in Bristol; this networking created an opportunity for Blink Studio to work with a well-established studio from the UK to produce an Arabic version of the well-known children’s animation series “Driver Dan’s Story Train” (see section 4.2.3). Such collaboration with companies within a Mature industry is likely to benefit less developed firms. A similar picture emerged from a study by Pendakur (1990), which suggested that co-production is a strategy that film and television producers adopt to gain international market access that is likely to result in additional revenue. Dealing with international partners and clients assists such firms in terms of expanding their potential and capabilities through gaining new experience. Consequently, the quality of their production is likely to improve. This experience and the high-quality production it drives will add cost advantages for these firms, which increases demand for their work. Accordingly, this will encourage the evolution of the industry life cycle, as demand is an industry evolution drivers (Grant, 2005).

In the light of the these results, networks do seem to play a promotional role for new and established entrants in the animation markets in each multiple case study country.

Table 12 summarises the key findings in terms of network functions:

Case Study	UK	Egypt	Emirates
Promotion for New entrant firms	✓	✓	✓
Established firms	✓	✓	✓

Table 12: Key Differences and Similarities between the Multiple Case Study Countries in Terms of Networks as a Promotional Channel

5.2.1.2 Learning Resources

Learning resource is the second category within the theme of network functions. This category refers to codes that indicate the use of networks as a channel for new knowledge. There are several different codes that indicate that network members within the multiple case study countries benefit from networks as a learning resource (codes listed in Table 11). These codes emerged from the below responses:

“I gained an overview about what sort of software and style that they have used” (studio manager from Dubai, 2013).

This response shows that networks can provide members with a picture of the current situation of technology used by competitors.

Similarly, the following quote:

*“Absolutely, it is all about network. When you joined a network you will ensure that you will **know what happens** in the animation industry not only in your country but you will know **what is happening around the world**. For example, we knew about this event from networking so, we came today from Cairo to Dubai to attend this event. Beside that we received fresh information about different aspects related to the animation industry” (Studio manager from Cairo, 2013).*

The previous quotation indicates that networks are a channel for gaining an awareness of what is going on around the world in the animation field and increasing access to information.

Further responses that reflect similar opinions are:

*“I have informal networks with different freelancers and agencies, I found it very effective as we **exchange information** and of course some of this information considers as a new knowledge for me” (studio manager from Manchester, 2013),*

*“From my experience, I can say networks is the main resource for **gaining new knowledge**. Before I set up my studio I used to attend summits and events that were run by different organizations related to the animation, as I am a member with its network. I am keen to expand my networks because I know that every time I will add something new to my knowledge”* (studio manager from Cairo, 2013).

*“Networks are very useful channel to **increase your knowledge**. Particularly in the field of business. Because most of the things that we need to learn comes from your experience beside other experience that you will gain from networking with other entrepreneurs”* (Studio manager from Bristol).

These responses demonstrate that networks are a resource for learning new knowledge and adding to existing knowledge.

An analysis of these codes reveals that firms and individuals within the animation industry depend on networking as a significant mechanism to gain and exchange knowledge. In particular, interviewees stressed the role of networks in managing their business positions in the animation market. This is because they assist with awareness and inform them about the current state of the market at both the local and global level. This result is in agreement with previous studies that discussed networks' roles in knowledge diffusion (Cole, 2008; Yoon & Malecki, 2010; Lee, 2011). However, the current study also reveals that network members in different stages of the industry life cycle seek to learn different types of knowledge. In the Growth stage, the need to learn new technical knowledge about animation skills, styles and methods is much

more pressing than it is in the Mature stage. This is because during the Growth stage, the skills providers, which mainly higher education institutions, are less developed than those at the Mature stage. Thus, networks can be considered a supportive source that can provide members with updated knowledge. This was demonstrated in the UAE case study, but not the Egyptian one, perhaps because the UAE's animation industry started later than Egypt's, yet they use more advanced technology. Thus, gaining updated knowledge about technical aspects is more essential while the industry is still in its developmental phase. However, at the Mature stage, networks are mainly used as a learning source for knowledge related to business issues such as possible competitors, partners, freelancers, employees, and buyers, though these are also important for the other stages of the animation industry life cycle. Table 13 summarises key differences and similarities between the multiple case study countries in terms of networks as a learning source.

Case Study	UK	Egypt	Emirates
Type of Knowledge			
Technical knowledge	×	×	✓
Business knowledge	✓	✓	✓

Table 13: Key differences and similarities between the multiple case study countries in terms of networks as a learning source

5.2.2 Network Activities

The second theme that emerged from the research findings on networks was network activities. The type of activities undertaken by networks affects their contribution in terms of knowledge diffusion. This theme consists of two categories, which are

regular face-to-face meetings and regular online meetings. In the following sections, each category will be presented and discussed.

5.2.2.1 Regular Face-to-Face Meetings

The first category in this theme is regular face-to-face meetings. There are several different emergent codes that indicate face-to-face meetings occurring between networks members listed in Table 11. These codes emerged from these responses:

“Some online groups, such as London Animation Club meet once a month, others, such as Festivus meet 3-4 times a year” (Studio manager from London, 2014).

*“We are members of Bristol Media & PACT, and I am personally a member of BAFTA... Bristol Media hold a **monthly networking meeting** and we **meet up regularly**, but informally with other studios. Our employees also **meet regularly** at animation events”* (Studio manager from Bristol, 2014).

Similarly, the code *a monthly meeting* was taken from the following response:

*“Here we have a formal network that connects media stakeholders together as we have a **monthly meeting** for all the companies in Dubai Media City”* (studio manager from Dubai, 2013).

“Currently I have a membership of different networks - some of them are formal where we have meetings and responsibility such as ASIFA Egypt, which is the African & Arabian chapter of ASIFA, the International

Association of Animation Filmmakers, *we meet several times per year*”
(studio manager from Cairo, 2013).

An analysis of these codes demonstrates that these network members have regular face-to-face meetings. Some of these networks have annual meetings, while others have monthly meetings, and these can be either formal or informal. Regularity of meetings ensures that there is consistent knowledge diffusion, which is likely to affect the development of the animation industry life cycle within the multiple case study countries, as knowledge diffusion is an important driver for industry development. This contrasts with findings from the Saudi animation industry (see section 4.1.6.1), where there is an absence of such meetings. This absence results in isolating the firms and individuals who work in the Saudi animation industry. Accordingly, this reduces knowledge diffusion by removing the interaction through face-to-face meetings that is effective in diffusing both tacit and explicit knowledge (Hakanson, 2010).

5.2.2.2 Regular Online Meetings

The second category within the network activities theme is regular online meetings. This category refers to code that indicate the use of online platforms for regular meetings, such as the following quotation:

“I do recommend Skwigly Animation Magazine (online) which covers a lot of news, universities, showcases films and has a chat-room where animators can meet” (Studio manager from London, 2014).

Assessing the networking website “*Skwigly Animation Magazine*” showed that its members have weekly meetings. These meetings are conducted within specified chat-rooms at a particular time every week to allow members to discuss topics of concern and exchange knowledge. This practice of informal but regular online networking has been identified only within the UK case study, which reflects the fact that the performance of networking is more effective in a Mature industry. This type of activity is a practical strategy for members with busy schedules, as it enables them to join meetings at their convenience. However, it would be useful for an industry in its early stages, such as the Saudi animation industry, to adopt this practice where there is no available infrastructure that enables practitioners to meet in person. Therefore, this study will also employ online meetings in the theoretical model constructed in the next chapter. Table 14 shows the key differences and similarities in terms of network activities between the multiple case study countries.

Case Study Network Activity	UK	Egypt	Emirates
Face to face meeting	✓	✓	✓
Online meeting	✓	×	×

Table 14: Key differences and similarities in network activities between the multiple case study countries

5.3 Government

This section presents the results of analysis of the Government factor. It seeks to identify how the governments of the multiple case study countries assist in the development of their animation industries, and the findings of this section will be employed to further develop the Theoretical Model in the next chapter. The data collection tools used were interviews with representatives of governmental bodies and studio managers. An analysis of the official websites for government bodies, and a

range of official documents was also undertaken along with an analysis of secondary data. From reviewing the literature and the related theories in Chapter Two, government does appear to influence the industry development, as it plays a considerable role in protecting local industry and improving the local economic situation. Therefore, codes that signified government support for the local animation industry were selected in order to discover how the governments of the multiple case study countries contributed to the development of different stages of the animation life cycle. The left column in Table 15 below shows codes that emerged from the collected data.

Codes	Category	Themes
<i>funding; receiving a great support and funding; sponsored to produce</i>	Sponsoring local production	Financial support
<i>financial support; access for using the facility; free access to a number of creative studios</i>	Incubating talents	
<i>introduction of Dubai Media City; provide infrastructure and facilities; provide training courses; provide investors with the logistic support and business set up services; development of local animation industry; facility and strategy has attracted world-class trainers, consultants and animation industry leaders; based in media city</i>	Establishing Media zone	Appropriate Infrastructure
<i>Launching marketplace; launching supportive events, launching festival; it conveys our ideas; connect us with the industry stakeholders; chance to meet with broadcasters directly</i>	Generating Distribution channels	
<i>requesting broadcasting of local production, the introduction of tax relief</i>	Regulation to promote local production	Regulation
<i>display in Ramadan; after the Iftar</i>	Prime time allotment	

Table 15: Themes, categories and codes emerging from the research on government

As illustrated in the table above, the selected codes were categorised into six categories as displayed in the middle column. These categories formed three main

themes: financial support, appropriate infrastructure, and regulations. In the following sections, each theme will be presented through an analysis of its categories and codes.

5.3.1 Financial support

The first theme that emerged from the Government factor was Financial Support. This theme is formed from two categories, Sponsoring Local Production and Incubating Talents.

5.3.1.1 Sponsoring local production

Under the Sponsoring Local Production category, several different codes listed in Table 15 arise from the collected data. These codes emerged from such response:

*“Egyptian television is considered as a strategic partner due to its supportive role in **funding** animation production”* (studio manager in Cairo, 2012).

This quotation shows that the government in Egypt, represented by the Radio and Television Union (responsible for all publicly funded radio and television channels), is considered to be a strategic partner for animation studios. However, this government support is exclusive to two animation studios, who monopolised the funding in the 1990s, Cairo Cartoon Studio and ZamZam Studio. It is widely believed that this support succeeded in boosting the industry, as illustrated in the following quotation,

*“We call that time the golden age for Egyptian animation because it was **receiving a great support and funding**. Every year the Egyptian Radio and Television Union set a **special budget** just for animation*

programmes so our production was so active. If we still received the same support, I am sure everything will be different but unfortunately the support stopped. However, the private sector from local private channels and our neighbour countries have taken over Egyptian television, which assists the survival of Egyptian animation” (the previous Head of the Animation Unit, 2012).

Similarly, the below quotation reflects the same picture:

*“We invent this character which reflects the rural Egyptian child and his simple life in the village. The Radio and Television Union **sponsored** the different seasons of Bakkar... it really cost as we commissioned Amro Sameer Ateif¹⁴, the most popular scenario writer in Egypt to write it because it is very important for the animation to be excellent, to be based on an excellent scenario” (Interview with Cairo Cartoon Studio manager, 2013).*

The above quotation shows that there was more investment available for a production sponsored by the government, and that this sponsorship enabled the studio to hire a highly professional team, thus improving the quality of the production.

A further quotation that indicates government sponsorship of local production is the following:

“The situation has changed significantly in the last ten years, the government has become more aware about the importance of the local animation industry, in the 90s there were no local animated television series, so I developed an animation pitch and when I presented to the

¹⁴ Amro Sameer Ateif is an award winning Egyptian scenarios writer, who specialises in television drama writing and children’s novels.

*head of Dubai television channel, he refused the idea and his argument was that imported animated television series are better and cheaper. Therefore, I developed my idea as a simple game for mobile phones. However, by that time the attitude toward the animation industry had changed and years after a successful launch of this mobile phone game, they asked me to create and direct an animation pitch to be developed as a first animated Emirate series which this year 2013 we are **sponsored to produce** the eighth season from this series that has wide reputation among the Arab region” (Fanar Production cofounder, 2013).*

The response from the manager of Fanar Production Studio, which is one of the pioneering Emirates animation studios, demonstrates that the Emirates government, represented by the Dubai Media Incorporation¹⁵, was attracted by his work on a mobile phone game that represented characters with local identities. Hence, he was encouraged to develop it into animation series for television. In addition, he has received sponsorship for this animation series “*Shaabiat al Cartoon*” (see 4.2.7.2) every year since it was launched.

Similarly, analysing secondary data and official documents from the UK shows that local animation makers were sponsored and commissioned by various different government bodies to produce short animation films in the early stage of the UK animation industry. For example, analysing The National Archive shows that Hallas Studio, a pioneer animation house in the UK, was sponsored by the Central Office of Information to produce short informative animation films during the 1940s. Additionally, the role played by Channel Four in supporting local animation in the

¹⁵ Dubai Media Incorporation is a government-owned company comprised of a number of media platforms including print and radio and TV channels

1980s was significant (Kliston, 2008). This included the creation of the Snowman, an iconic example of UK animation (see section 4.4.6.3).

Analysis of this information suggests that sponsorship of local production by governments has influenced the development of their local animation industries. This form of financial support is most evident in terms of its impact in the Introduction and Growth stages. This is because, at these stages, the industry still needs further improvement in terms of quality and quantity of production compared with Mature industries. This improvement requires substantial financial investment to cover upgrades to advanced hardware and the latest software, as well as permitting the hiring of experienced and competent crews. The example from Egypt showed that local animation studios that received government financial sponsorship succeeded in producing animation with better quality in terms of story, design and direction compared to those that did not receive such sponsorship. This is because the budgets for these productions were able to be much larger, enabling investment in advanced equipment and the on boarding of experienced crew members, as well as directors and writers with good reputations. Similarly, the findings from the Emirates demonstrate that government support via sponsoring pioneering local productions has resulted in the production of better animation with qualities that attract audiences from a range of other Arab countries. Consequently, the private sector started to sponsor these successful animation series as commercial enterprises. Likewise, the UK animation industry in its early stage received sponsorship from the government, and thus it is clear that this strategy has been adopted in all the multiple case study countries (Table 16), and there is little doubt that it played a significant role in supporting local industry in all of these cases. In contrast, the findings from examining the Saudi

animation industry show that there is an absence of sponsorship for local productions (see section 4.1.2), which has affected the development of the industry, as makers struggle with the capital barriers that animation production throws up. Therefore, this study will adopt sponsorship of local production as part of the Theoretical Model that will be discussed at Chapter Six.

Case study	UK	Egypt	Emirates
Financial Support			
Sponsoring local production	✓	✓	✓

Table 16: Key differences and similarities between the multiple case study countries in terms of sponsoring local production

5.3.1.2 Incubating Talents

The second category that forms part of the financial support theme is Incubating Talents. The evidence suggests that there is government incubation for talents within the animation industry. From analysing the official website for Twofour54, the Abu Dhabi Media Zone, the study found that this media zone has an incubation centre. This incubation centre, The Creative Lab, aims to support talents in the creative industries including animation. The Creative Lab offers a membership that provides its members with access to several different forms of support, including use of workstations including an industry standard computer lab and sound and editing suites; business consultations; and gaining real experience by volunteering for live projects or by shadowing, which allows members to work alongside industry experts. According to a young entrepreneur who joined The Creative Lab incubator as she worked on developing an animated short series with a small team, they received great

support from the Creative Lab including access to workstations, business advice, and promotion for their project, as illustrated in this quotation:

*“I got a **financial support** that covered the production of my animated project. Besides using the sound studio in The Creative Lab, they also **assisted me to get access** for using the facility of a professional animation studio. At the moment, they are **helping me to find out line-producers**”.*

Moreover, The Creative Lab also incubates talents seeking work as freelancers. An illustration of this is a young talent who has succeeded in developing an animated digital children’s series for a mobile app platform:

*“As a member of Creative Lab, I have a **free access to a number of creative studios** that are equipped with industry standard...the most significant is that their **creative team worked with me** from the beginning till finishing my project. All that was for free including **business and creative advice**”.*

An analysis of the above quotes suggests that incubating talents facilitates them entering the industry. It assists in overcoming the expensive capital outlay that prevents them from entering the market and provides them with free or low-cost workspaces as well as access to specialised facilities and creative studios. These facilities target talents and entrepreneurs in the creative field at the beginner level, in which it differs from the facilities that a media city offers to established firms, which will be discussed later (see section 5.3.2.1). Such incubation facilities include work spaces that members can use for planning and managing their projects, as well as shared specialised studios with creative suites and shared editing studios. This enables talents who seek to work as freelancers to get real experience and start their

own businesses without incurring the financial losses of hiring office space or buying expensive creative and editing suites. In addition, incubation offers them free business advice and consultations. These advantages assist them in their early years, which are usually the most challenging. This type of support was found only in the Emirates case study (Table 17), and this could be one of the aspects that assisted the local industry in achieving faster growth compared with Egypt. This is because this type of support assists newcomers with overcoming barriers such as initial capital requirements and access to technology. These barriers are usually faced by the industry in the early stages including Introduction and Growth (Porter, 1980). Although the UK offers several of incubation centres within its universities, these incubation centres are for all entrepreneurs; those in Emirates are targeted specifically at creative entrepreneurs. In the UK, however, there are a variety of creative courses that provide talents with access to technology. The depth of entrepreneurial skills and knowledge provided to students is also greater than in the Emirates and Egypt. The animation industry in the UK is classified as a fragmented industry with many firms competing in it (see section 4.4.1). However, the animation industries in the Emirates and Egypt are classified as oligopoly markets, in which a small number of firms dominate the market as a result of high barriers to entry (McCarthy & Perreault, 2005). Due to the very small number of firms in the Saudi animation industry and a lack of entrepreneurship education for students there who are studying animation and related courses, there is an urgent need for this type of support. Therefore, this study will employ this strategy as part of the Theoretical Model in the Introduction Stage of the industry, when there are particularly high barriers that those wishing to enter the industry must face (see Section 6.2.1.2.2).

Case study	UK	Egypt	Emirates
Incubation centre	×	×	✓

Table 17: Key differences in incubating talents between the multiple case study countries

5.3.2 Appropriate Infrastructure

The second theme that emerged from researching the Government factor was the availability of Appropriate Infrastructure. There are two categories that form this theme which are Establishing Media Zones and Availability of Distribution Channels (Table 15).

5.3.2.1 Establishing Media Zones

The findings identified a variety of evidence that indicated that the establishment of a media zone by the government contributed to the development of media industry life cycles in general, including that of the animation industry. An analysis of official documents suggested that the establishment of media zones assisted the creation of a competitive business environment. This is reflected in this quotation:

“Following the introduction of Dubai Media City in 2001, the Emirates become a favourite spot for media companies in the region” (Arab Media Outlook, 2013).

This quotation shows that the establishment of a media zone in the Emirates has attracted different media firms. Similarly, the same concept is reflected in the following quotation:

“A number of broadcasters have chosen Emirates in the past two years as their headquarters... Emirates has positioned itself as a commercial hub for regional content producers. TV and film production studios in both Dubai (Dubai Studio City) and Abu Dhabi (twofour54) provide facilities for production and post-production of content to the companies housed in their free zones. Major international content producers such as Cartoon Network, Sky News Arabia (launched in 2012), CNN, and BBC Arabic, as well as regional content creators such as Al Arabiya and O3 Productions (both MBC subsidiaries) are all based in the Emirates” (the Arab media report, 2015, p172, 173).

This quotation demonstrates that the establishment of a number of media zones in the Emirates has attracted regional and international brands to set up their headquarters in these media zones. This quotation provides a clear indication that the establishment of such media zones attracted Cartoon Network, a key international animation stakeholder. An interview with the Head of Academic Development and Operation in Abu Dhabi Media Zone explained how the media zone succeeded in attracting key international brands:

*“In fact, we want to make Abu Dhabi a centre for media industry... here we have four units: Intaj (Arabic term means productivity) that aims to **provide infrastructure and facilities** for a productive environment for the production and post production. We create the environment and we also provide workforce to use this environment. Thus, we establish the second unit in the Media Zone which is Tadreeb (Arabic term means training) that aims to **provide training courses** for different media platform such as television, journalism, gaming and animation. The third unit is Ibtcar*

*(Arabic term means innovation) that aims to incubate young talents and guide them by providing them with funding and advice. The fourth unit is Tawasol (Arabic term means communicate), that aims to facilitate networking and **provide investors with the logistic support and business set up services** (Alollagy, 2013).*

This response shows that the establishment of the Media Zone in Abu Dhabi contributed to the development of the media industry by providing the appropriate infrastructure for the media industry, including technical infrastructure, training, and logistical support. In addition, it has encouraged the development of the local animation industry, as demonstrated in the following quotation:

*“The media zone in Abu Dhabi has made a great contribution for **the development of local animation industry** because our facility and strategy has attracted world-class trainers, consultants and animation industry leaders such as Cartoon network ... for example, 75% of the first generation who graduated from the Cartoon Network Animation Academy are working with the local animation industry, which means we expect more people with high skills will work within the animation sector in the future, which of course will enhance the local industry” (Alollagy, 2013).*

Further evidence that shows how establishing a media zone attracts key brands, that affect the development of the local animation industry clearly appears in the following quotation:

*“The region has also witnessed a **growing interest from international players in the Arab animation industry**. In October 2010, Turner Broadcasting Systems launched its free-to-air Arabic*

version of Cartoon Network in the region, while also creating an animation training academy in collaboration with twofour54 tadreeb in Abu Dhabi and an animation studio to develop local Arabic content for Cartoon Network” (the Arabic media report, 2015).

An analysis of these quotes suggests that establishing media zones plays a significant role in encouraging the evolution of the animation industry lifecycle. Although there are media zones in all the countries within the multiple case study, only the findings from Emirates demonstrate a great impact on animation industry development. One possible explanation for this is that the Emirates Media Zone combines production and educational services specifically for the animation industry. The Egyptian media zone attracted local and regional media firms initially, as it was the first media zone in the region when it was established in 2000, but when the Emirates Media Zone was established, it offered competitive services within the entire MENA region. The level of facilities was such as to attract key international firms, which were interested in the opportunities provided by a new market. In the UK, the media industry is an established Mature industry that already has an excellent infrastructure. According to an analysis of secondary data (see section 4.4.4), the existing media clusters in London and Bristol attracted international and local media firms to benefit from the advantages of existing infrastructure and distribution channels. However, when much of the London media industry moved to the new campus in Salford where MediaCityUK is located, while the industry seems to have been sustained and international collaborations maintained, it has not expanded significantly.

A significant impact on the development of the animation industry is clearly seen in the above examples from the Emirates, showing that the establishment of a number of media zones with competitive services can assist with industry development. These media zones attracted a number of animation entrepreneurs from various Arab and Asian countries to set up firms in the Emirates. Key animation organisations from North America and Europe such as Turner Broadcast Systems, Bournemouth University and the National Centre for Computer Animation in the UK were also attracted by these opportunities, which has made the Emirates a significant media hub in the Middle East and North Africa region. Partnership and investment from key international stakeholders has improved the infrastructure even more, thanks to investors' partnerships and experience. Accordingly, local animation firms have benefitted from these infrastructure improvements as well as gaining advantage from knowledge transferred from experienced international stakeholders. A study by Morawetz (2008) presents similar findings; as he pointed out: "*A key policy idea put forward to grow domestic film industries quickly was that countries should try to take advantage of foreign runaway productions, which can provide the local industry with valuable experience and investment*" (Morawetz, 2008, p.136).

A further explanation for this might be that a media zone is equipped with facilities that encourage interaction, such as proximal office spaces and shared work facilities including meeting rooms and post-production equipment such as recording and editing suites. Moreover, workers are likely to share local services such as cafés and restaurants where daily interaction of members from different local and international firms can occur. Accordingly, they are able to build trust with one another, which encourages knowledge exchange. This mean that establishing a media zone catalyses

knowledge diffusion, which is one of the main drivers for industry life cycle development. This finding supports Riege's (2005) study, which suggests that the accessibility of formal and informal gatherings in the infrastructure encourages knowledge diffusion.

In the light of these facts, it can be argued that the establishment of a media zone will assist the development of the media industry life cycle, including animation. This is because it provides the industry with an environment that facilitates knowledge diffusion and productivity. Thus, this study will employ this strategy within the Theoretical Model.

5.3.2.2 Generating Distribution Channels

The second category that forms part of the infrastructure theme is Generating Distribution Channels¹⁶. The findings of this study included several concepts that signified the generation of distribution channels by the governments within the multiple case study countries. The concept *launching animation marketplace* emerged from a study visit to the Emirates in November 2013 to collect data about the Emirates animation industry. The visit involved attending The Big Entertainment Show 2013 in Dubai. This event included a sub-event titled My Content, which was a media marketplace. The visit allowed observations of how effective launching such an event is in terms of facilitating distribution channels within the Animation industry, particularly as it was considered to be the first marketplace solely serving

¹⁶ The term distribution channel refers to channels that facilitate the process whereby goods or services reach their final target. In the animation industry, there are limited distribution channels that can be used, such as personal submission of a pitch proposals to a producer or attending media events such as film festivals, film competitions, and media marketplaces.

the animation industry in the MENA region. This event facilitated meetings between animation buyers and sellers through exhibitions and one-to-one meetings. In addition, it was a great opportunity for Arab talents in the region to meet with broadcasters and industry stakeholders to present animation project pitches. During the event, there were several industry talks that focused on issue faced by the animation industry in the Arab world, as well as marketing events for animation content for local and international buyers. During this visit, the researcher met two talents from Saudi Arabia who had travelled to Dubai to attend this event in order to present an animation pitch they had created.

The concept *launching supportive events* also emerged from a documentary analysis of organisations within the animation industry in the UK. The analysis showed that several different events were launched by government councils targeting the industry's makers. One example from the UK is CMC, the Children's Media Conference, which runs several events throughout the year to guide and prepare UK film makers, including producers and animation studios, to address international media marketplaces such as the Annecy International Animation Film Festival, MIPTV (International Television Programme Market), and MIPCOM (International Market of Communication Programme). The CMC also runs The International Exchange, which is an event that hosts international industry stakeholders, including broadcasters, co-producers, funders, and investors. During the International Exchange, animation industry makers have the chance to present briefs about their animation projects at pitching sessions. Furthermore, the CMC runs the Rights Exchange where it facilitates animation makers selling or buying IP content to and from publishers and interactive media developers. These events include keynote talks

and face-to-face meetings between the participants to discuss issues arising (CMC, 2015).

A further code is *launching of animation festival*. A study visit in October 2014 to LAIF 2014, the London Animation International Festival, was undertaken in order to collect data about networks within the animation industry in the UK. However, the author discovered that, although this festival is considered a networking event, it also plays a role as a distribution channel for the animation industry, as the festival opens the door to talents to submit their animated films. It is an effective channel that allows talents to promote their skills to industry stakeholders directly without intermediaries. Alongside screenings of participants' films, workshops and master classes are delivered by professionals at a range of levels, including people who work in the animation industry; animation students; and even workshops for children to introduce them to the basic skills of animation filmmaking. Moreover, each day there are a number of industry talks presented by key figures from the animation industry, where attendees have the opportunity to ask about any aspects relating to the industry.

Likewise, a key festival in Egypt is CIAF, the Cairo International Animation Forum, an annual forum for the animation industry. During the forum, several activity threads are run, such as animation film competitions for students, competitions for animated television series, and industry talks and workshops delivered by professionals (CIAF, 2014). The important point of this forum is that it facilitates connections with key figures in the industry in Egypt, such as producers and sponsors, who are not otherwise easily accessible in Egypt due to limitations of infrastructure such as active websites for these key figures. This is reflected in the following quotation:

“This forum conveys our ideas, as previously we could not find any financial support for production and we could not find channels that connect us with the industry stakeholders” (Participants in CIAF, 2014).

This quotation indicates how this event works as a distribution channel in Egypt for the animation industry to help compensate for the lack of a media marketplace in the region. This is supported by another quotation, by a studio manager from Cairo:

“We need more like the International Animation Form as it give us the chance to meet with broadcasters directly to promote our production, as most of the broadcasters already have been monopolized by a few mature animation studios. However, this forum allows us to meet with them and show them our potential” (Studio Manager, 2014).

A further concept that indicates the generation of distribution channels is *the establishing of different councils* that work as intermediaries to facilitate access to key figures in the industry chain such as filmmakers, producers, broadcasters, and distributors. The government in Egypt has established and funded organizations that focus on the creative sector, including the animation industry, such as the Cultural Development Fund, the General Organization of Cultural Palaces, The National Centre for Cinema, and The National Centre for Children’s Culture, which all come under the umbrella of the Ministry of Culture in Egypt. These organisations work as distribution channels, creating bridges between creative artists and between them and industry stakeholders by providing funding, giving support, and launching events such as cultural festivals.

Similarly, the Emirates government has a number of organizations that support the industry and facilitate connections to the industry stakeholders, including the Creative Lab, Dubai Culture, Abu Dhabi Film Commission, and Dubai Film and TV Commission. Each of these organizations has an active official website that offers detailed information about strategies and services and provides key figures' contact information, which makes them readily accessible distribution channels.

Analysis of these facts demonstrates that in a more Mature industry, the distribution channels are more structured than in a Growth industry such as Egypt and the Emirates. In the UK, there are several councils that are considered to be mediators, as well as a variety of organised events that support the animation industry across the UK at different times through the year such as animation festivals, animation conferences, and forums. In a Growth industry such as Egypt and the Emirates, fewer structured distribution channels exist, which affects the quality of their infrastructure, based as it is on a limited number of organisations; additionally, only a few support events have been launched recently in the last ten years, and these are only in key cities. This is despite the fact that it does seem that this type of event facilitates access to additional distribution channels. However, at least some events and organisation are found in all the multiple case study countries (Table 18).

Case study	UK	Egypt	Emirates
Distribution channel			
Events	✓	✓	✓
Organisations	✓	✓	✓

Table 18: Key differences and similarities between the multiple case study countries in terms of distribution channels

In contrast, the findings from the Saudi animation industry reveal that it is difficult to access any industry stakeholders due to the weakness of the infrastructure supporting the animation industry: there is also an absence of supportive events such as festivals and marketplaces, and few helpful organisations. Thus, this study argues that the government could upgrade and encourage the development of the animation industry life cycle by generating and supporting such distribution channels. This is would be an obvious way to facilitate the connection between different parties in the animation industry supply chain by assisting animation makers in reaching possible buyers and facilitating them finding business partners. This result matches those observed in an earlier study by Bassett et al (2002), that stressed the role that wildlife film festivals played in developing the moving image industry in Bristol; as it pointed out: *“film festivals are important not only for the award of prizes and gaining of publicity for filmmakers, but also as valuable sources of contacts and information on forthcoming commissions, new filmmaking techniques and emerging broadcasting technologies”* (Bassett et al, 2002, p174).

In the light of this, this study argues that generating distribution channels will facilitate the development of the animation industry life cycle, and hence, this study will employ this technique in the Theoretical Model (6.2.2.1.2).

5.3.3 Supportive Regulations

Another theme that emerged from the research on Government factors is Supportive Regulations. This theme is formed from two categories: regulation to promote local production and prime time allotment; each category will be presented separately.

5.3.3.1 Regulation to Promote Local Production

The section identifies codes that indicate that governments set regulations to promote local production. These codes, which are listed in Table 15, emerged from a document analysis of the UK animation industry. In 1990, the Broadcasting Act was launched, which required the public service broadcasters to commission at least 25% of programming from local independent firms (Davies & Sigthorsson, 2013). Although this regulation was not designed specifically for animation programming, it affected the animation industry as well, becoming particularly significant with the growth of commercial and satellite channels directed at children in the UK in the 1990s, such as Disney, Nickelodeon and Cartoon Network. This increased competition and encouraged public service broadcasters to expand their time allocated to children's programmes, culminating in the launch of two children's channels: CBBC and CBeebies in 2002 (Ofcom, 2007). The BBC limited the screening of imported children's programmes, including animation content: in 2013, 85% of its children's programmes, including animation content, were produced locally (Ofcom, 2013).

Similarly, the following quotation indicates that the UK government, represented by the Department for Culture, Media and Sport, set regulations to promote the local animation industry:

“Animation plays an important role in British culture. The Government’s core aim in providing tax relief is to promote the sustainable production of culturally British animation. This aim is supported through:

(a) Encouraging the production of animation that might not otherwise be made;

- (b) *Promoting sustainability in British animation; and*
- (c) *Maintaining a critical mass of UK infrastructure, creative and technical expertise, to facilitate the production of culturally British animation” (DCMS, 2012, p4).*

There are two criteria that animation productions should meet to qualify for this new tax scheme. First, they should pass the UK’s cultural test, which is a points-based assessment that requires animation programmes to score at least 16 of a possible 31 points. The test includes four main sections:

- A. Cultural content
- B. Cultural contribution
- C. Cultural hubs
- D. Cultural practitioners

Section C of this test looks at collaborations with local animation facilities (Table 19).

According to a quotation from the report:

“This section will measure the use of the UK’s animation making facilities. It is envisaged that points will be awarded for the use of UK facilities for shooting, visual design, layout and storyboarding, visual effects, special effects, music recording, voice recording, audio post-production and picture post production” (DCMS, 2012, p7).

			point
C1	Animation shooting/visual design/layout and storyboarding/visual effects/special effects	At least 50%	2
C2	Music recording/audio post-production/picture post-production/voice recording for animation	At least 50%	1
Total			3

Table 19: Cultural test: section C-cultural hubs (DCMS, 2012)

In addition, section D of the cultural test (Table 20) shows that, to qualify for the tax scheme, the animation project must be made, at least in part, by UK or EEA citizens or residents, as illustrated in this quotation:

“This section will measure the use of personnel with creative input to the cultural value of an animation. Points will be awarded for the use of UK or EEA nationals or residents in key animation making roles as identified in Annex A” (DCMS, 2012, p7).

		Notes: Must be British or EEA nationals/ residents	<i>Points</i>
D1	<i>Director</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
D2	<i>Scriptwriter</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
D3	<i>Producer</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
D4	<i>Composer</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
D5	<i>Principle actors</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
D6	<i>Animation Director or majority of cast</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
D7	<i>Key staff</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
D8	<i>Majority of crew</i>	<i>At least 50% if more than one per series</i>	<i>1</i>
<i>Total</i>			<i>8</i>

Table 20: Cultural test: Section D-Cultural practitioners (DCMS, 2012)

Although there is no official data yet to measure the impact of the new tax scheme, there are clear indications that positive results have been generated in the first three years of since the launch of these regulations. Findings suggest that this tax relief scheme has encouraged the establishment of new animation studios in the UK, and it has attracted international producers to partner with British studios and invest in the UK. This can be clearly seen from the following quotation from a presentation by Oli Hyatt, the chairman of Animation UK at the Anima't Sitges-Barcelona a networking summit (2014):

“The Tax credit... in short is a free money. So, that is great, it is about 20% of your budget.... The business is growing, new companies have been setting up. It is open door with co-production and co-operation and better-working links with the rest of the world... people start to come more for us... for films as well...our feature industry is not typically large but over the next few years, there are a couple more starting” (Europa Creativa Desk, 2014).

This demonstrates that the UK government has influenced the development of its animation industry through setting supportive regulations that encourage the demand for local animation firms.

This type of regulation, which promotes local production, was identified only in the UK case study (Table 21).

Case study	UK	Egypt	Emirates
Regulation to promote local production			
Tax relief	✓	×	×
Requesting broadcast of local production	✓	×	×

Table 21: Key differences and similarities between the multiple case study countries in terms of regulation to promote local production

In the case of the Broadcasting Act, regulation encouraged competition between the public service broadcasters in the UK to commission local television industry makers, including animation creators. A similar picture was found in the Korean industry (Qin, 2006), where the Korean government set regulations that required broadcasters to give about 1 to 1.5% of total time to domestic animation content. Likewise, a study by Fung (2007), discussed the role of the Chinese government in encouraging the development of the local animation industry through similar regulations: in 2000, SARFT (the State Administration of Radio Film and Television) allowed national TV channels to broadcast only 40% imported animation. Then, in 2004, SARFT extended the amount of domestic animation programs to at least 50% of those broadcast.

Likewise, the introduction of the tax relief scheme for animation production in the UK has resulted in an increase the number of firms entering the animation industry, as well as increasing the number of co-productions between the UK and international firms. A similar picture emerged from a study on the film industry in Canada by Wesson (2010). It revealed that tax incentives for the film industry contributed to the development of indigenous production in Canada because they attracted international filmmakers, and this in turn created more job opportunities in the country as well as offering valuable experience to domestic production crews.

This study argues that this type of regulation encourages the industry's sustainability through ensuring continuing demand. Regulation ***Requiring Broadcasting of Local Production*** would be adopted at the Growth stage in the Theoretical Model (see section 6.2.2.2.2). This because this type of regulation seeks to encourage local demand, by broadcasting local productions on local screens even if the quality has not

reached the stage where it will attract international buyers. Therefore, this study will employ this type of regulation at the Growth stage. (see section 6.2.2.2.2). Then, it will extend this to apply at Mature stage also (see section 6.2.3.1.1), as the findings show that it has also been successfully adopted by the UK, which has a Mature animation industry.

However, *Tax Relief* seeks to attract local and international production through reducing the budget of animation production. To attract international partners, the quality of the production must also be competitive. Thus, a tax relief approach is more appropriate at the Mature stage, when the industry has achieved a strong position, to help maintain it. Therefore, this study will employ similar regulation in the development of the Theoretical Model only at the Mature stage (see Section 6.2.3.1.1).

5.3.3.2 Prime Time Allotment

The second category that forms part of the supportive regulation theme is prime time allotment. The findings show that governments set regulations to allot prime time for displaying the local animation. The concept *displays in Ramadan* emerged from data collected from the Emirates animation industry. Ramadan is considered high season for the television industry among Arab countries, as all the television channels in Arab countries seek to attract greater audiences by producing a number of new dramas, soap operas, and television shows to be aired for the first time in Ramadan. Analysing a number of online local newspapers in the Emirates demonstrates that the

Sama Dubai channel and Dubai channel¹⁷ also display local animation series during Ramadan.

A further concept that indicated the allotment of prime time to local production was *after the iftar*¹⁸ time. As mentioned, the month of Ramadan is considered the seasonal time for television among Arab countries. In particular, the main peak time is the time after the *iftar*, which usually between seven and ten o'clock in the evening. This peak time is preferred by audiences, and according to an interview with Haidar Mohammed (2013), co-founder of Fanar Production, one of the pioneer studios in the Emirates:

"Since the first launch of 'Shaabiyat Al cartoon' in 2006, Sama Dubai broadcasts it every year in Ramadan after the Iftar time when all the family enjoy it together."

These findings reveal that one of the significant regulations that have been set to support local animation industry is prime time allotment for local production. The above data from the Emirates shows that the government, represented by the public television channels, has favoured pioneering local animation production. In spite of the fact that this local animation is lower quality and less attractive than imported production, they support it through displaying it in the prime time of the year and, particularly, at the peak time of day. This has a positive impact, as it encourages competition between these pioneering studios and increases investment in the animation industry. This finding is in agreement with Wu Chen's study (2010), that shows how the government in China has assisted the development of local animation through setting regulations in 2006 that favoured domestic animation by banning the

¹⁷ Sama Dubai channel and Dubai channel both are TV channels under the umbrella of Dubai Media Incorporation, which is the government body that is responsible for the television sector in Dubai city.

¹⁸ Iftar is the main meal in Ramadan, which is known as the time of breaking the fast, when sunset starts.

broadcast of imported animation between 5pm to 8pm. This regulation expanded further in 2009, as the time of banning was extended till 9pm. As a result of this regulation, the demand on the local animation increased, which assisted the development of the animation industry in China.

Although this type of regulation was identified in the Emirates case only (Table 22), the study argues that it is suitable for both the Growth and Mature stages. However, it seems to have the clearest impact on the industry in its early Growth stage. This because it supports the animation makers by encouraging commercial bodies to sponsor local animation as they will gain advantage from displaying promotional advertising bookending the animation in prime time. This sponsorship will assist the industry makers by allowing them to invest in improving the quality of their productions. Therefore, this study will employ this strategy in the Theoretical Model at the Growth stage (see Section 6.2.2.2.2). However, at Mature stage, this regulation still assists with sustaining growth, as it protects the local production from being over taken by cheaper competitors. Thus, this study will recommend applying this regulation at the Mature stage also (see section 6.2.3.1.1).

Case study	UK	Egypt	Emirates
Regulation			
Allotment of prime time	×	×	✓

Table 22: Key differences and similarities between the multiple case study countries in terms of allotment of prime time

5.4 Location

This section presents findings and analysis about the Location factor. It seeks to find out how location could affect the development of the animation industry, and the

findings of this section will be used to guide the development of the Theoretical Model in the next chapter. The data analysed in this section was collected through interviews with different perspective including course leaders, students and studio managers. It has been argued in the existing literature that knowledge diffusion and labour capital are the motivation for selecting particular locations (Pratt, 2000; Yoon, 2008; Dai, 2012). Therefore, this study attempts to identify how location could affect the development of the different stages of the animation industry life cycle by selecting codes that indicate the rationale for selecting a particular location. Table 23 below displays the codes that emerged from the research.

Codes	Category	Theme
<i>based in the media city; CITV is just on the second floor, CBBC in the next building; our location in Abu Dhabi Media Zone increased our partnership; Dubai Studio City is close to our campus; Bristol is really up for animation production</i>	Proximity of higher education institution to media firms	Being in a media cluster
<i>close to the Dubai Media Corporation; Setting our company in Dubai Media City allow us to be informed of any new updated information about the market; Most of the media production companies located here, so this make our work more efficiency; a strategic partner; Broadcasters have their headquarters</i>	Proximity of animation studio to broadcasters	

Table 23: Codes, categories and themes that emerged from research on location

As shown in the above table, the codes are categorised in two categories. These categories are Proximity of Higher Education Institution to Media Firms and the Proximity of Animation Firms to Broadcasters. These categories formed a single theme, which is Being in a Media Cluster.

5.4.1 Being in a Media Cluster

As mentioned above, this theme is formed from two categories, which are Proximity of Higher Education Institutions to Media Firms and Proximity of Animation Firms to Broadcasters. Each category will be analysed and discussed further below.

5.4.1.1 Proximity of Higher Education Institutions to Media Firms

This study identified several codes that indicate that the proximity of higher education institutions to media firms affects the development of the animation industry. This is clearly shown in this quotation:

"the animation course is based in the media city campus, CITV is just on the second floor, CBBC in the next building" (animation programme leader at Salford University, 2014).

The above response was from the animation course leader at Salford University, and she was talking about what she thought was significant about studying animation at Salford University. She emphasised the location of the university, at MediaCityUK, and its proximity to two major British children's television providers (CITV and CBBC) that are involved with producing animation content. She added that this location enables the university to collaborate with these providers and a range of different media firms, allowing students to take up internships, experience study visits, and train with professionals. She pointed out:

"We attracted some big speakers...we have people from the industry come and deliver talks and workshops...we do have people come to talk about variety of different aspects. Not necessarily just about animation,

they speak about lots of things” (animation programme leader at Salford University, 2014).

A similar concept emerged from the quotation below which was given by the principle lecturer of the Cartoon Network Animation Academy, located in Abu Dhabi Media Zone; he pointed out:

"our location in Abu Dhabi Media Zone increased our partnership with most of the media firms in this zone".

This quotation stresses that the location of the institution in the media city enabled them to collaborate with additional media firms.

According to the animation course programme leader at Zayed University in Dubai, the University relocated its College of Arts and Creative Enterprises, where the animation courses are taught, to be closer to Dubai Studio City. This is captured in the quotation below:

"the Dubai Studio City is close to our campus. This facilitates for students to undertake internships there".

The programme leader emphasised the significance of being located near to a media cluster, which facilitates students undertaking internships within firms from Dubai Studio City.

A similar emphasis also emerged from the programme leader for the animation course at the University of West of England, located in Bristol, one of the animation clusters in the UK with a strong reputation for production. As he pointed out:

"We very fortunate here... Bristol is really up for animation production not just within the UK but within Europe. So we are very fortunate and we are very well connected with the animation industry".

An analysis of these concepts reveals that the location where an animation course is taught is affected by its proximity to media clusters such as a media city or zone. Respondents indicated that being within a media city added more value to their institutions. This is because that this proximity encourages and facilitates collaboration with animation industry firms such as studios and broadcasters. In particular, there is an emphasis on the fact that this proximity will facilitate student transfer to internships and other interactions between these firms and the students, allowing learners to develop higher levels of industry experience and knowledge. Besides this, the study visit demonstrates that the animation courses that are located within media clusters, such as Salford University in MediaCityUK and Cartoon Networks Animation Academy in Abu Dhabi Media zone, benefit from sharing industry-standard facilities as used by professionals (see section 5.1.2.2). There is no doubt that a location in a media cluster allows animation programme members to gain advantage from the knowledge spillover that occurs from daily interaction with members of professional teams sharing local services. This proximity is only found within the UK and Emirates (Table 24). In Egypt, there is no such proximity in spite of the fact that animation courses and animation firms are located in Cairo city; they are not clustered in the same area. This may be one reason why Egypt has a less developed animation education industry than the Emirates and the UK. Likewise, in Saudi Arabia, there is an absence of Media

Cities and there is no connection or collaboration between courses that teach animation and animation firms. Therefore, this study will employ this strategy within the Theoretical Model at the Introduction stage, suggesting the establishment of incubation centres within higher education establishments to facilitate collaboration and knowledge diffusion (see section 6.2.1.2.2). At the Growth stage, this study suggests creating a Media City located close to higher education establishments, to maximise the benefits of proximity, in which collaboration with new and established firms located in this purpose-built area could benefit educational institutions further (see section 6.2.2.1.1).

Case study	UK	Egypt	Emirates
Proximity of higher education institutions to media firms	✓	✗	✓

Table 24: Key differences and similarities between the multiple case study countries

5.4.1.2 Proximity of Animation Studios to Broadcasters

The second category within the theme of being in a media cluster is the proximity of animation studios to broadcasters. There are a number of codes, which listed in Table 23 indicate that this proximity has an impact on the development of the animation industry. This is captured in such responses:

“I live in Abu Dhabi. However, here in Dubai Media City, we are so close to the Dubai Media Corporation. I prefer to be in the picture”

(Animation studio manager from Dubai, 2013).

This quotation emphasises the proximity of this studio to Dubai Media Corporation, which has commissioned the studio to produce several animation series since 2006. The respondent pointed out that, despite living outside Dubai, he decided to set up his studio in Dubai to be closer to the broadcaster that was commissioning work from his studio.

Similar opinion was reflected in the following quotation:

“Setting our company in Dubai Media City allows us to be informed of any new updated information about the market opportunity” (Animation Studio manager from Dubai, 2013).

This indicates that the firm’s location in Dubai Media City enables it to gain an advantage based on local knowledge about possible opportunities.

This perspective was also found in Egypt, where most of the animation studios are located in Cairo city, which is also where the Radio and Television Union is located:

“In Egypt, to work in animation we have to be in Cairo because it is the most appropriate place for it. Particularly, the Television Union as he consider as a strategic partner for the animation studios” (animation studio manager from Cairo, 2013).

This significance extends to proximity to the Egyptian Media City, which hosts a number of private channels that are important buyers of the animation production, and this is captured in the quotation below:

“There are lots of opportunities here, the Media City is not far from here, lots of Arab Broadcasters have their headquarter either in Cairo or Media City” (animation studio in Cairo, 2013)

This response stresses how a location near to the Media City provides the firm with market opportunities, as that area hosts a number of Arab broadcasters that are common clients for them.

These quotations demonstrate that animation studios in industries in the Growth stage, such as in Egypt and the Emirates, prefer to establish themselves close to key broadcasters. This is because these studios depend heavily on the sponsorship that they receive from such broadcasters. Since there is a shortage of private sponsors, most of the local animation that was successful was sponsored or produced by key broadcasters who at the same time benefited from the exclusive right to display these productions for their first showing (see section 5.3.1.1).

The issue of spatial agglomeration in the creative industry has been recognized in a previous study by Cole (2007), who suggests that firms in creative industries gain advantages from co-location because of

“the viability of a production system based on projects, depends highly on the efficiency of the underlying labour markets and that specialized labour markets are facilitated by clustering. In a cluster, the risk of investing into building specialized skills is reduced for workers, as the presence of multiple employers enables them to find work on an ongoing basis and move from

project to project, without having to sell the house, move the kids, and create a new social network”.

In spite of the advantages of such proximity, this factor seems to have less influence on Mature industries; proximity of animation studios to broadcasters is clearly desirable in Egypt and Emirates (Table 25), but findings from the UK suggest that owners of animation studios believe that personal convenience is the main rationale for choosing a location, such as living in the same area where they work or the fact that their families live near. A possible explanation for this is that animation firms in Egypt and Emirates have higher uncertainty than those in the UK due to the limited number of buyers; in these Growth industries, demand is restricted to the local level. A similar picture emerges from a study by Maskell and Lorenzen (2004). Their study argues that high uncertainty is a critical rationale that motivates firms to cluster. A further explanation could be that in a Mature industry, there is better availability of excellent infrastructure that makes access to distribution channels less difficult. Therefore, there is no need to be permanently close to particular broadcasters, as several different events exist that allow animation firms to meet with clients and broadcasters. Moreover, the Mature industry is multi-nodal, rather than having only one cluster/Media City. A multi-nodal industry has a more complex distributed structure with different clusters across the country. In addition, a Mature industry receives additional demand from international clients, making it less important to be close to local clients or to a local cluster.

Therefore, this study will employ this strategy in the development of the Theoretical Model at the Growth stage; the Model will recommend creating a creative cluster to

encourage and facilitate this proximity between animation studios and broadcasters (see section 6.2.2.1.1). This purpose-built Media City is intended to attract local, regional and even international media industry stakeholders. Thus, it would be most effective to launch this when the industry reaches its Growth stage, as in the Introduction stage, it needs to focus on improving its labour, capital, and skills.

Case study	UK	Egypt	Emirates
Proximity of animation studio to broadcasters	×	✓	✓

Table 25: Key differences and similarities between the multiple case study countries

5.5 Chapter Discussion

Examining the Higher Education Institution factor showed that its contribution is important in all stages of the industry life cycle. However, it is more important in the Introduction stage due to its provisioning the industry with skilled labour and entrepreneurs. This study revealed that there are strategies that should be adopted by higher education institutions in order to maximise this effect, based on strategies related to education approach, teaching staff, facilities, and location of higher education institutions that have positively influenced outcomes in the multiple case study countries in terms of assisting to enhance the development of their animation industries. Adopting industry engagement and entrepreneurship strategies provides the industry with skilled labour and entrepreneurs who have practical experience that adds value to their capabilities. With regard to teaching staff, this study demonstrated that recruiting teaching staff who can perform in combined roles as both animation

filmmakers and teachers is an effective strategy to ensure that students are provided with cutting edge knowledge and skills. In terms of the facilities provided by higher education, the study findings revealed that using industry standard equipment to deliver animation courses provides students with the most authentic experience, which enhances their potential and capability as a highly skilled workforce with experience in using the most advanced technology in the animation industry. With regard to the location of higher education institutions, the findings identified a pattern that proximity to a media cluster, such as media zone or city, adds value to the institution. This is because such spatial proximity is more efficient for collaboration, in terms of both student placements and co-project assignments. In addition, results from this study also suggest that locating higher education institutions in a media city or zone offers advantages to students and staff because they benefit from sharing industry standard facilities by being able to acquire cutting edge technical knowledge similar to that of professionals. They can also benefit from knowledge spillovers that occur during daily interactions with local business members sharing local services.

In terms of Networks factor, although these play a significant role in the development of the animation industry in all life cycle stages, the findings of this research revealed that networks are most effective in the Growth stage. This is because, at that point, the industry has already established a pool of skilled labour and entrepreneurs at the Introduction stage. Thus, in the Growth stage, its most pressing need is to deepen these resources. Networks encourage knowledge exchange and diffusion, thus playing an effective role in upgrading the level of workforce skills through diffusion and updating knowledge of new and advanced techniques. The diffusion of knowledge and new styles provides inspiration and creativity that increases competence and

competition between firms. Moreover, networks assist entrepreneurs with finding more clients, which increases the scale of demand within the industry. The findings of this research suggest that there are a number of strategies that have been adopted to make the network factor more effective. In the early stages of the industry, more formal networks are required, with regular frequent meetings; this is due to the shortage, or in some cases, absence, of distribution channels that arises from weak infrastructure. In these early stages, the findings demonstrate that networks play a major role as a learning source, providing members with updated skills, techniques, and information to improve the quality of their work, as well as acting as excellent guides for individuals and firms that intend to enter the market. However, at the Mature stage, network become less important as a learning source because, at this stage, individuals and firms are already qualified, with advanced skills compared with those found in firms in the Introduction and Growth stages, who require further improvement of their skills. At the Mature stage excellent infrastructures and the availability of distribution channels also decreases the importance of formal networks. Therefore, informal networks are more appropriate at this stage, with meetings that can be less frequent, to fit with busy schedules; this is important, as in the Mature stage, there is high demand for the industry's work, which reduces the amount of free time practitioners have for networking compared to those working in early-stage industries. Overall, a key strategy that increases network effectiveness in terms of knowledge diffusion is to create interactive activities, with either online networks or physical networks. Such activities include face-to-face meetings, conferences, and online chat.

In terms of the Government factor, the findings of this study show that governments contribute to the development of the animation industry life cycle through financial aid, regulation, and the provision of supportive infrastructures. In the Introduction stage, government support through financial aid in the form of establishing incubation centres is most effective, as it encourages entrepreneurs to enter the animation market. This is because as the industry emerges, high barriers to entry, such as the expense of major capital investment, also arise. An incubation strategy helps to overcome such entry barriers by providing free or low cost office space and specialised equipment to reduce capital costs. Incubation centres also assist in overcoming the lack of experience that could otherwise impede animation entrepreneurs by providing business advice. As well as providing support for incubation centres, governments that provide wider sponsorship for local production can help to overcome the issues that these forms face due to lack of investment in producing animation. This is necessary, as investors, including key broadcasters and media producers, often prefer not to invest in new local studios once they have established a relationship with experienced foreign animation studios that provide high quality outsourcing services. At the Growth stage, one effective strategy appears to be government support in the form of increasing the availability of distribution channels such as media market places. This is due to the fact that in the Growth stage, demand is only moderate, and these types of events are useful to encourage further demand. At the Mature stage, the findings show that government support in a form of supportive regulations that encourage local demand is an appropriate strategy. This is effective because, in the Mature stage, demand is high due to the excellent quality of the animation produced; however, the local industry may still be threatened by low-cost competitors or outsourcing providers. Thus, a strategy of imposing regulation to ensure continued

demand for local production helps to sustain the industry's security at the Mature stage.

In terms of Location, the current study demonstrates that this factor is more important in the early stages of the animation industry. According to the study findings, an effective strategy that influences the development of local animation is the agglomeration of the animation supply chain, such as that seen in a media city. In fact, the issue of spatial agglomeration or clustering has been noted in the existing literature as one of the major factors that supports industry development (Porter, 1980). Similarly, the findings from this study show that proximity between of organisations within the industry's value structure, including skills providers, animation studios, and broadcasters, encourages the development of the local animation industry. However, in a Mature industry, location is not as significant as it is in the Introduction and Growth stages. At this latter industry stage, the selection of location by local firms is determined more by personal requirements such as the residence of choice of the animation entrepreneur. This is because in a Mature industry, the availability of skilled labour, accessible distribution channels, and excellent infrastructure facilitate firms accessing the supply chain without the need for spatial proximity.

5.6 Summary

This chapter presented an overview and analysis of findings based on the research framework factors. In order to identify how these factors encourage the development of the different stages of the animation industry life cycle, it adopted a thematic

analysis where codes emerging from the research data were categorised, then sorted into themes. A discussion on the chapter findings identified how each factor contributes to the development of the different industry life cycle stages. These findings, along with the findings from Chapter Four, will be employed in the development of the Theoretical Model in the next chapter.

6 Discussion and Theoretical Model Development

This chapter will present two of the main contributions of knowledge generated by this thesis. It will present the Theoretical Model for the development of the animation industry life cycle, followed by developing Recommendations based on the current state of the Saudi animation industry that should allow it to move from its Introduction stage to a more advanced level. This chapter utilises the findings from the industry analysis in Chapter Four and the analysis of the research framework in Chapter Five to develop the Theoretical Model. In addition, this chapter will present an evaluation of the Theoretical Model to assess its validity.

6.1 A Theoretical Model for the Development of the Animation Industry Life Cycle

In this section, a Theoretical Model for the development of the animation industry life cycle will be established. This model aims to link all of the relevant findings together as it considers the different characteristic features of the Introduction, Growth, and Mature stages of the animation industry life cycle. It aims to identify and address the barriers that prevent Introduction and Growth stage industries from moving to their Mature stage, and it also identifies the barriers that prevent Mature stage industries from thriving. Thus, it employs a range of strategies that emerge from the discussion of the findings to overcome these barriers.

Initially, this section will provide a holistic description of the Theoretical Model. Then, it will present detailed Strategies for each stage of the animation industry life cycle.

6.1.1 A Holistic Picture of the Theoretical Model

A holistic picture of the Theoretical Model is illustrated in **Figure 32**. The Model utilizes the industry life cycle curve (illustrated in red line), which shows the development of the industry stages (see section 2.1.2.1). The Model also identifies key barriers that constrain animation industry development in the Introduction and Growth stages and prevent such industries from moving to the Mature stage. Besides that, it identifies the possible barriers that could threaten the Mature stage. In each life cycle stage, the Model illustrates a Condition Cycle, which represents the key conditions found in the animation industry in that stage within the studied countries in Chapter Four. The development of the Condition Cycle and Barriers Model were presented and explained in Chapter Four (see section 4.5.5). The Theoretical Model also includes the main effective strategies identified in Chapter Five for addressing the barriers that constrain each stage. The strategies derived from the thematic analysis, where the analysis finding identified themes, which represent particular strategies that have been used by the multiple case study to overcome particular barrier. The Model determines specific main strategies for each stage, and each of these strategies includes a number of different actions that should be taken in order to achieve this strategy. More clarification of these strategies and how they are derived will be presented in the following subsections, with detailed discussion of the particular codes and categories from which they originate discussed for each strategy.

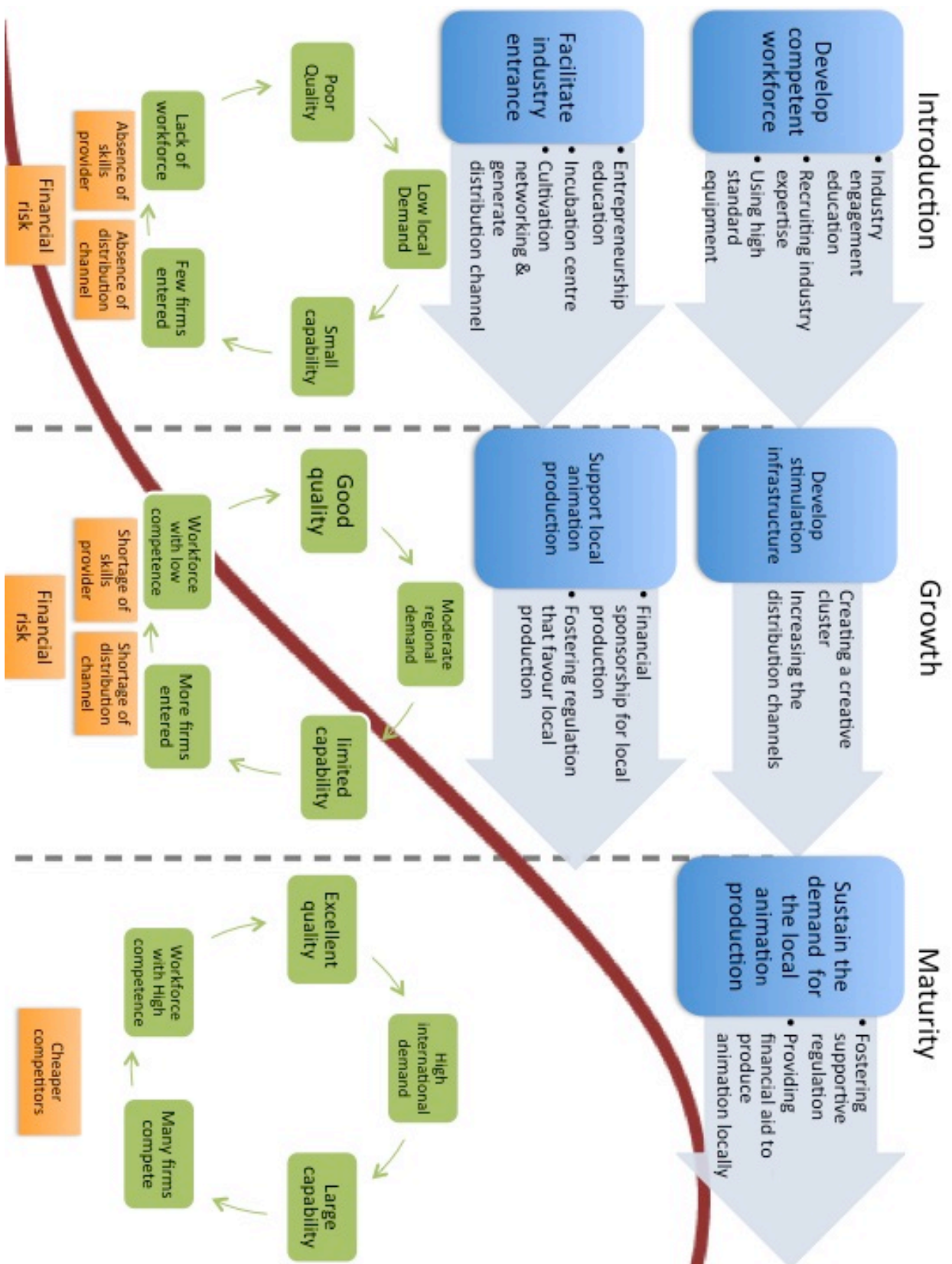


Figure 32: Theoretical Model for the development of the animation industry life cycle

6.1.2 Strategies for the Introduction Stage

As illustrated in Figure 29, at the Introduction stage of the animation industry, the Condition Cycle shows that there is a lack of a competent workforce. This lack of a competent workforce results in the production of poor quality animation, which in turn leads a low demand for the local production. As a result of this low demand, the firms involved have limited financial resources, which makes their capability smaller. All these factors increase the uncertainty of the animation market, which makes it risky for new enterprises to enter the animation industry. Therefore, there are only a few firms competing in the animation industry at the Introduction stage.

As all Condition Cycle elements have direct correlations with other elements, forming a continuous cycle (see section 4.5.5), amending some elements will affect other elements directly. The Theoretical Model therefore proposes two main strategies. The first strategy involves *developing a competent workforce*. The rationale for this strategy is to improve the quality of local production, and thus to increase demand. This is because poor quality animation is one of the aspects that negatively affects demand for a product (for more details see section 6.1.2.1). The second main strategy offered for the Introduction stage involves *facilitating industry entry*. The rationale for this strategy is to increase the number of entrants to the industry, which will thereby increase competition between them and encourage each firm to improve its production to attract additional buyers (for more details see section 6.1.2.2). In the following sub-sections, further explanation is given on how the Theoretical Model works within the Introduction stage.

6.1.2.1 *Developing A Competent Workforce*

One of the main strategies that the Theoretical Model suggests to encourage the animation industry life cycle to move from its Introduction to Growth stage is the development of a competent workforce. As it mentioned earlier, the Condition Cycle elements have direct coloration, so the rationale for this strategy is that developing a competent workforce will result in improving the quality of local production, and thus to increase demand. This is because poor quality animation is one of the aspects that negatively affects demand for a product. This increasing of the demand will lead to increase the low capability for the firms at this stage. This decrease the uncertainty of the animation market, which enable more firms to enter the market.

The workforce is considered to be one of the most vital inputs for the animation industry, and hence a shortage of skilled workers will negatively affect industry evolution. The development of workforce is therefore a key factor in the evolution of the industry life cycle. As mentioned previously, the rationale for developing a competent workforce is to improve the quality of local animation production in order to attract buyers. Based on this research, it is clear that Growth and Mature animation industries offer higher quality products from famous studios such as Aardman in the UK, Disney in the USA, and Nippon from Japan. This high quality is the main reason that broadcasters from different countries buy the rights to screen such programmes and to adapt them to their languages. This large scale of demand is an indicator of excellent quality in animation production. Playing host to international award winners is also a significant indicator of excellent quality in an industry. In less-developed animation industries, the poor quality does not attract even local buyers, and thus, poor quality is the main reason behind low demand. The Theoretical Model

therefore focuses on developing a competent workforce at the Introduction stage to improve quality in order to increase demand, which is one of the main drivers for industry evolution.

To achieve this particular strategy, the Theoretical Model sets out a number of actions that should be taken. Figure 33 illustrates this strategy and the suggested actions, which include adopting an industry engagement education approach, recruiting industry expertise to deliver animation courses, using facilities of the highest standards, and ensuring the proximity of higher education institutions to media clusters. As well as describing each action, the figure explains the key contributions they make, and in the following section, each action will be discussed in more detail.

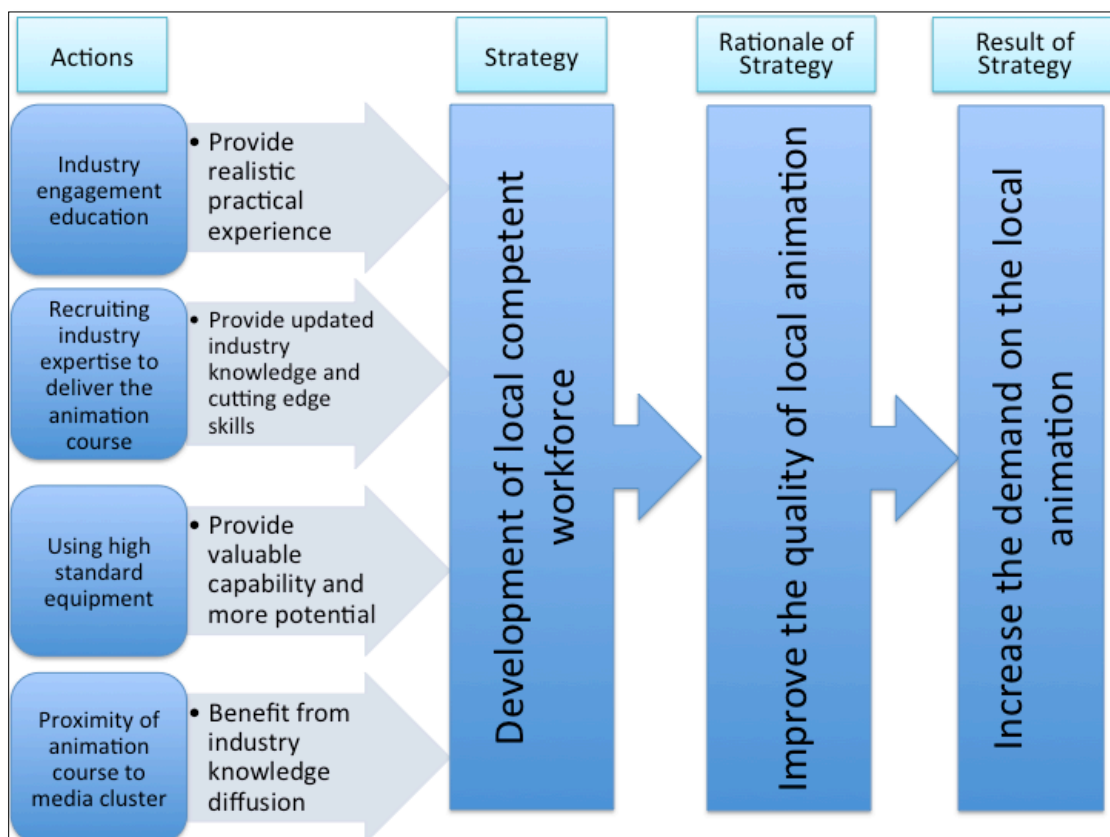


Figure 33: Flowchart of the Actions and Rationale of the Strategy for Development of a Competent Workforce

A. Adopting Industry Engagement Education Approaches

This study has revealed that the multiple case study countries have adopted education approaches that involve industry engagement including co-projects and placements (see Table 6 and section 5.1.1.1). This approach provides students, who are the future workforce, with opportunities to apply what they have learned in a real-world context. Thus, they will gain realistic practical experience. Providing students with industry experience during their studies make them more capable of working effectively, as it polishes their technical and employability skills by ensuring that they understand what is needed to perform that role effectively. Findings from the multiple case study, show that students are provided with skills and experience that enable them to start directly working in industry after graduation. Therefore, adopting an industry engagement education approach adds additional opportunities for students to gain competency, and hence, this Model suggests its adoption in the Introduction stage.

B. Recruiting Industry Expertise to Deliver Animation Courses

This approach is an effective method that has been adopted in the multiple case study countries. It plays a significant role in developing a competent workforce, as teaching staff who combine industry positions with teaching provide students with additional competency-based skills. This is because such teaching staff have cutting edge professional skills and updated knowledge of animation due to their occupational experience. Thus, students can acquire in-depth knowledge of current technical animation skills and knowledge of working in the animation industry from current

practitioners. Therefore, recruiting industry experts who combine animation making and subject knowledge as tutors for animation courses is one of the actions that this model suggests adopting in the Introduction stage in order to develop a competent workforce.

C. Using Industry Standard Equipment

Another action that this model suggests in order to develop a competent workforce is using industry standard equipment, including the latest hardware and software, to deliver the animation course. This is because it provides students with experience of working with the most advanced equipment, which allows students to reach their full potential. Findings indicate that there are differences within the workforce between those who graduate from animation courses that benefit from advanced technology and those who learn using only traditional methods (see section 5.1.2.2). The animation industry involves many complex processes that advanced technology has facilitated, so it is essential to prepare students to work with this technology in order to become more competent. Thus, this Model suggests the use of high-standard equipment during training in order to develop a competent workforce in the early stages of the animation industry life cycle.

D. The Proximity of Higher Education Institutions to Media Clusters

Another action that the Theoretical Model suggests to develop a competent workforce is to ensure the proximity of higher education institutions to a media cluster. This type of location facilitates collaboration between students and animation firms, since it is

more efficient for students to transfer between industry projects and their more formal teaching sessions. It also has several advantages for students and staff personally, as they benefit from sharing industry standard facilities and gain cutting edge technical knowledge that increases their potential and capabilities. Additionally, they benefit from knowledge spillover through daily interaction with firm members. This spillover assists in the transfer of both explicit and tacit knowledge, with the tacit knowledge being most important, as this difficult to transfer through non-personal means. Gaining tacit knowledge from industry employees is highly likely to improve students' competence levels, and thus, the Theoretical Model suggests employing this action to develop a competent workforce overall.

6.1.2.2 Facilitating Industry Entrance

The second main strategy that the Theoretical Model draws on to assist the industry to move from its Introduction to its Growth stage is facilitating industry entrance. At the Introduction stage of the animation industry, there are high entry barriers that prevent new firms from entering the industry, such as high risks due to uncertainty and the high capital requirements of the animation industry; a lack of enterprise knowledge; and an absence of distribution channels. The rationale of this strategy is to increase the number of firms competing in the market, because competition between firms tends to improve the quality of their products as they seek to attract additional customers. Thus, increasing the number of animation firms should increase competition and, in turn, lead to improved quality in terms of animation production, along with increased availability of a competent workforce. In order to achieve this strategy, several actions should be taken, Figure 34 illustrates these actions and

identifies the contribution of each one. These actions include adopting entrepreneur education; cultivating networks; and establishing incubation centres.

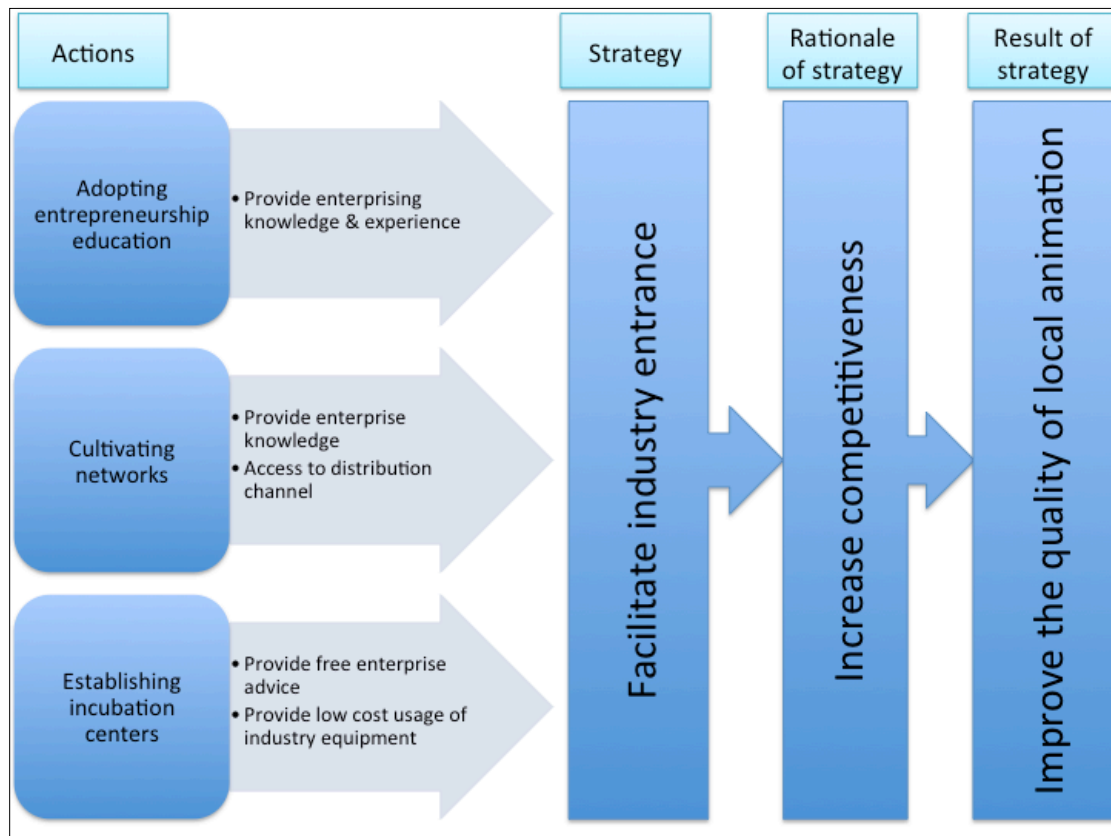


Figure 34: Flowchart of the Actions and Rationale of the Strategy for facilitate industry entrance

A. Adopting Entrepreneurship Education

Adopting an education approach that involves entrepreneurship education is an essential action that the Theoretical Model suggests to facilitate additional industry entrants. This is because entrepreneurship education provides students with an in-depth knowledge of enterprise as well as offering the opportunity for students to apply this knowledge by practicing alongside genuine entrepreneurs. Consequently, those students who have this enterprise knowledge, along with their fundamental subject

knowledge of animation, are more willing to set up their own animation businesses than students who only have subject knowledge.

B. Cultivating Networks

Another action that the Theoretical Model suggests to facilitate industry entrance is the cultivation of networks. This is because the research findings demonstrate that networks are an effective mechanism that assists animation enterprises with overcoming industry entry barriers such as lack of capital and an absence of distribution channels, while allowing them additional routes towards finding industry resources by facilitating knowledge diffusion. Networks allow connections to be made between members from all different levels of the industry, including new and mature competitors, freelancers, suppliers and buyers, and thus they assist in overcoming start-up difficulties by providing a sense of what the new trends are, where the evolution of the industry is going, what the risks are that new entrants can expect to face, and where such firms can find resources for the capital they have available, as well as helping in a more obvious way by finding additional clients. It can be argued that networks are the main source for gaining knowledge on enterprise in the animation industry. Therefore, this Theoretical Model suggests cultivating networks in the early stage of the industry to facilitate industry entrance. The Theoretical Model also suggests that an appropriate approach to cultivating networks and distribution channels in Introduction stage is launching networking events, particularly animation festivals and competitions at a local level, as these are more appropriate for this early stage, where the industry is relatively new and people need to discover more about it and how to engage with it. Such events allow individuals and organisations within animation to gain opportunities to meet each other, but

launching online networks also works alongside these events to promote links. However, to ensure that these networks fulfil their function in terms of knowledge diffusion, the findings show that they must be highly interactive. This is because interactivity is the main vehicle for transferring both explicit knowledge, as conveyed through written words and similar symbology, and tacit knowledge, which is difficult to communicate (Nonaka et al, 2001). Therefore, cultivating networks also involves monitoring their activities. According to the results of this research, networking events such as animation festivals and forums include activities that involve interaction such as practical workshops, which are good for transferring technical knowledge related to animation including different techniques and software demonstrations. On the other hand, interactive sessions that involve industry stakeholders' speaking, where audiences have the opportunity to ask questions are also beneficial in providing knowledge that guides new firms towards access to the distribution channels, as these can be somewhat absent in the industry's Introduction stage. Thus, this Model suggests cultivating networks through launching such event in the initial stages to diffuse knowledge and facilitate new entrants to the animation industry.

C. Establishing Incubation Centres

Another action that the Theoretical Model suggests in order to facilitate industry entrance is establishing incubation centres. One of the main barriers to industry entry is financial capital, and incubation centres assist firms to overcome this obstacle by reducing the budget they require to begin work. In fact, enterprise in the animation industry requires a high budget to cover the equipment required, such as professional hardware, fast rendering engines, the latest software with updated licenses, additional

software for specialist techniques, and hiring an experienced crew. This type of extended budget introduces high levels of uncertainty, particularly in the Introduction stage, by creating cost disadvantages, as broadcasters prefer to pay more for imported animation produced by an established or mature studio rather than supporting a new entrant. This means that the low profits that the new entrant gains will not cover the high budget required for effective animation production. An incubation centre allows them to benefit from the free use of workspace, an Internet connection, and a creative studio that includes advanced industry-standard equipment. In addition, it provides them with business advice and consultation. These advantages facilitate those who are looking to enter the industry and set up their own enterprises by giving them the opportunity to gain experience without incurring financial ruin. They can also benefit from understanding industry trends, which gives them a strong start in the early years of their businesses, which are usually the most challenging. Therefore, the Theoretical Model suggests establishing incubation centres in the Introduction stage.

6.1.3 Strategies for the Growth Stage

As illustrated in **Figure 30**, the Condition Cycle for the Growth stage shows that there is an availability of a workforce at basic competence levels, good quality of animation production, moderate demand, and moderate number of firms competing in the industry. The Condition Cycle for the Growth stage is shaped by the Mobility Barriers that this study identifies at this stage, which include a shortage of skills providers, distribution channels, and financial resources. In the following section, an explanation of how this Condition Cycle is shaped by the mobility barriers that are found in the animation industry in its Growth stage is provided.

A shortage of skills providers affects the overall quality of animation production. As mentioned previously, in the industry life cycle sections in Chapter Four, for the animation industry in Egypt and Emirates, both in their Growth stage, this research assessed the quality of their animation production by the scale of demand, whether local, regional or international. Based on this, both countries offer good quality productions because they have both local and regional demand. Although a Growth industry is defined as one in which there is availability of a competent workforce and in which the quality of the production is improved, it is unlikely to reach the excellent quality achieved by a Mature industry, as the workforce in the Growth stage still has an overall lower skill level. This is generally because shortages in the quantity and quality of skills providers still remain. Quantity shortage refers to the fact that only a few institutions offer full-time courses in animation and related skills, while in a Mature industry, there are many full-time courses that cover animation and related subjects. In terms of a quality shortage, in a Growth industry there is generally an absence of animation courses that specialise in a particular field of animation; course are more often designed to provide knowledge of animation techniques and skills in general. However, in a Mature industry, there are a variety of different courses that specialise in different subjects related to the animation industry. This provides higher competency in fields that require particular subject knowledge such as particular animation techniques, scriptwriting, or animated film directing.

In terms of the shortage of distribution channels, this affects the amount of demand for local production in a Growth industry. This is because there are only a limited number of distribution channels, as the infrastructure is still weak compared with that expected in the Mature stage. According to the findings of this study, the absence of a

media marketplace is one of the main factors that affect marketing animation production. This type of distribution channel is clearly very important in terms of marketing and promotion, and this in turn will assist by increasing the demand for the animation productions within the Growth industry.

A shortage of financial resources in a Growth industry is common; the animation firms still face financial shortages, because their resources are not sufficient to cover the budgets required to increase their potential and capacity. This is due to the fact that these firms generate only moderate demand from local and regional buyers, even though this is likely larger than that found in industries that are still in the Introduction stage such as Saudi Arabia, Oman, and Kuwait, for several reasons, as explained in the two previous paragraphs, the lack of excellence and the lack of distribution channels. Such limited demand generates a matching limitation on resources that prevents animation studios in such industries from spending more to improve the quantity and the quality of their production. This contrasts poorly with studios in a Mature stage industry, which encounter high demand due to their productions' excellent quality, and which hence have a much greater capability to produce, or production potential. Therefore, the Theoretical Model seeks to overcome the barriers of financial shortages in the Growth stage by improving the quality of production. This will generate more demand, which is the main resource that allows firms to meet their financial requirements. In light of this, the Theoretical Model attempts to overcome mobility barriers to assist the transition of the animation industry from the Growth stage to the Maturity stage. As mentioned previously, Condition Cycle elements have a direct correlation to one another in a continuous cycle, so changing some elements will affect all other elements directly. Therefore, the Theoretical Model suggests two main strategies for the Growth stage. The first

strategy is *Developing infrastructure to stimulate the industry*; the rationale for this strategy is to facilitate knowledge diffusion by allowing subject knowledge and skills in animation to diffuse in the creative cluster and knowledge related to marketing and promotion for firms to diffuse through various distribution channels (for more details see section 6.1.3.1). The second strategy for supporting and developing the Growth industry is *supporting local production*; the rationale for this strategy is to increase the financial resources available for local production. It involves financial sponsorship for local production and fostering regulations that favour the local animation industry (for more details see section 6.1.3.2). In a similar manner to the principles outlined for the Introduction stage, each of these strategies has a number of actions that should be undertaken. These two main strategies and the actions needed will be explained more below.

6.1.3.1 *Developing infrastructure to stimulate the industry*

The Theoretical Model suggests developing a Stimulation Infrastructure to facilitate moving the animation industry from the Growth stage to the Mature stage. The rationale for developing an infrastructure that can stimulate the industry is to encourage the knowledge diffusion that can assist with overcoming mobility barriers in this stage. Diffusing knowledge related to animation subjects, including modern skills and techniques, will begin to compensate for the shortage of skills providers in preparing a highly competent workforce, while diffusing knowledge related to marketing and promotion will assist firms to overcome the disadvantages created by a shortage of distribution channels. The approach that this strategy undertakes to develop an infrastructure to promote both types of knowledge diffusion involves two actions, which are creating a creative cluster and increasing the number of distribution

channels. Figure 35 outlines the necessary actions that will be discussed in more details below.

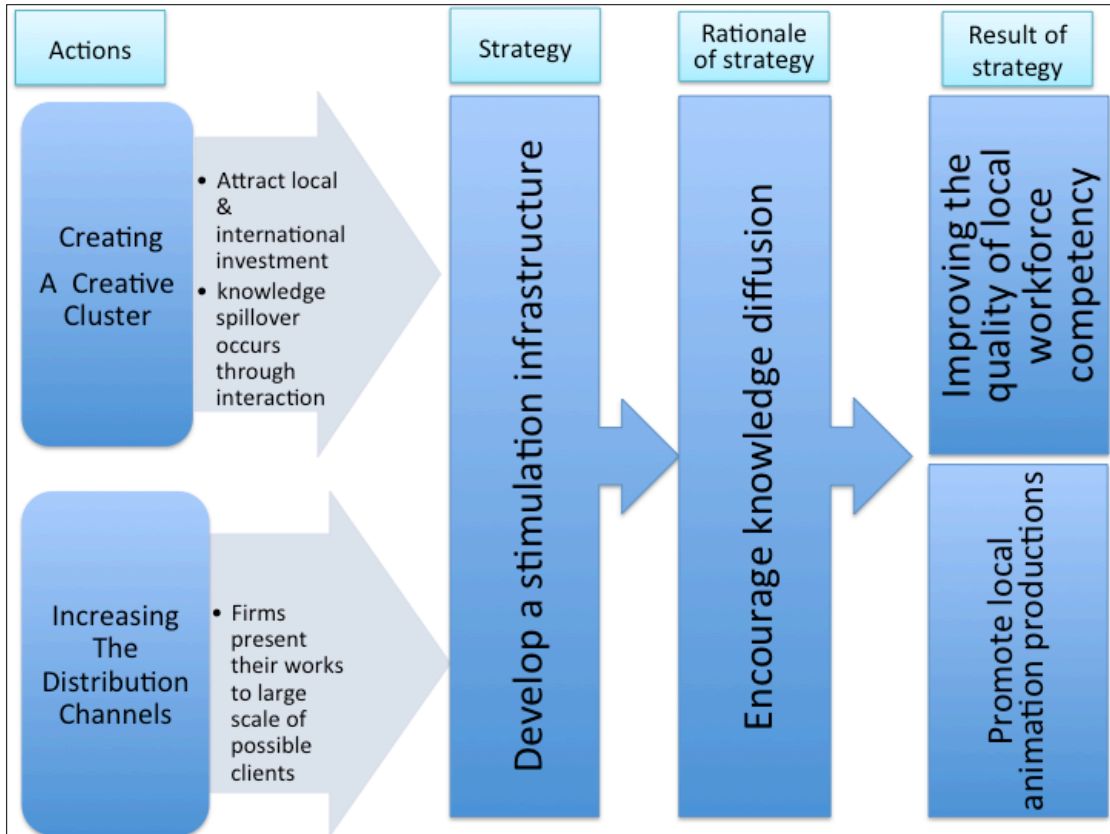


Figure 35: Flowchart of the Actions and Rationale of the Strategy for Explaining for develop a stimulation infrastructure

A. Creating A Creative Cluster

In terms of the first action, the Theoretical Model suggests that those involved in a creative community can help the industry to thrive by learning from one another. This is because, in a creative cluster, the proximity of different organizations, shared business services, and local service involves lots of interactions that allow knowledge spillover to occur. According to the study findings, a creative cluster that is provided with supportive creative business services plays a key role in attracting foreign firms

from countries that have more Mature industries, which seek to benefit from the growing market's opportunities. This agglomeration of external Mature firms is likely to result in transferring high-level skills to local firms that are located in the same creative cluster, which will result in improving the quality of the local workforce, which in turn will improve the quality and capability of local animation firms, allowing them to compete with those from Mature industries. Moreover, local animation firms can benefit from collaboration opportunities with international firms that have stronger animation industries by various means such as co-productions and partnerships, which definitely will add valuable experience to the local industry.

B. Increasing Distribution Channels

The other action that this Theoretical Model suggests undertaking to develop a stimulation infrastructure is *increasing distribution channels*, and in particular, expanding the media marketplace. This is because a shortage of distribution channels is one of the main barriers for the animation industry in the Growth stage. This shortage affects marketing and promotion for local animation production, making it less active, as there are few chances for the animation makers to be introduced to the buyers. Therefore, launching additional media marketplace will facilitate the animation firms presenting their work to different clients. According to the findings of this research, these events are an effective approach to allowing animation makers to diffuse knowledge about their production more efficiently. Therefore, additional availability of distribution channels will assist with the promotion of local animation productions, which in turn will enhance demand.

6.1.3.2 Support Local Animation Production

As illustrated in **Figure 32**, the Theoretical Model suggests support local animation production strategy in order to enable the animation industry to move from the Growth stage to the Mature stage. The rationale for this strategy is to overcome the shortage of financial resources that is one of the barriers that animation entrepreneurs at the Growth stage face. To accomplish this strategy, the Theoretical Model offers two actions, financial sponsorship for local production and fostering regulations that favour the local animation industry. Figure 36 shows these actions that will be discussed below.

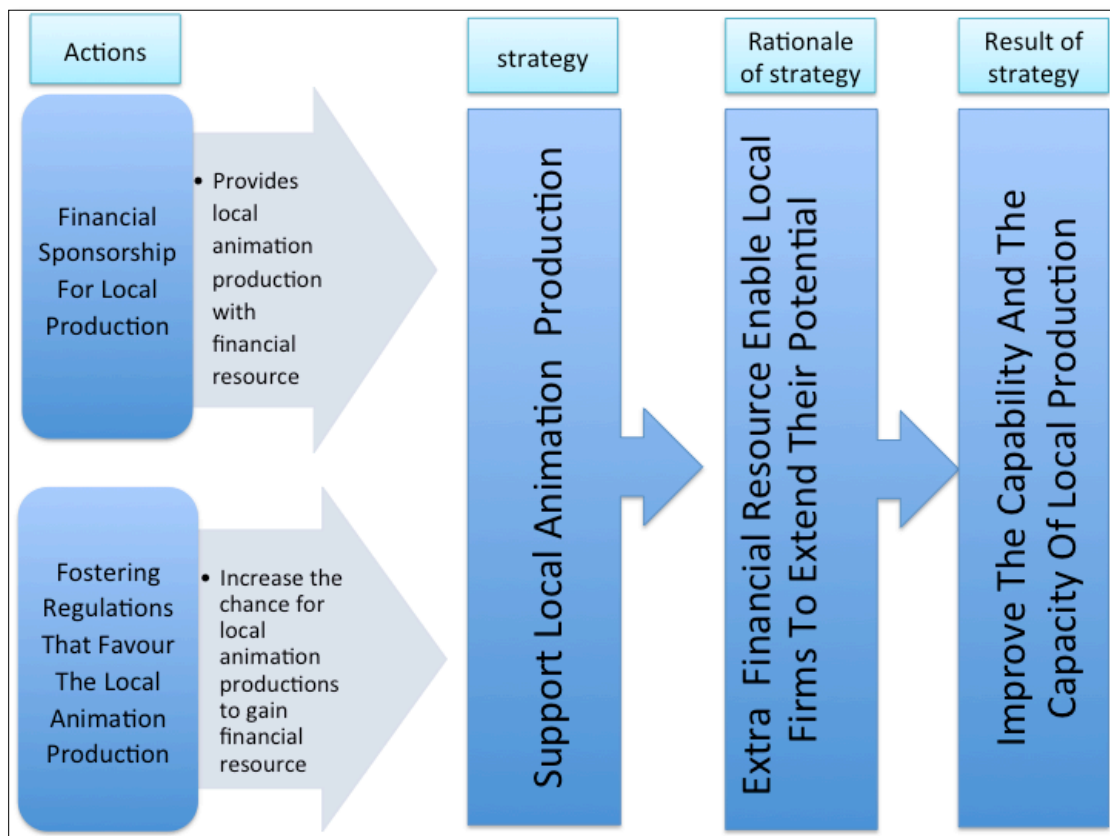


Figure 36: Flowchart of the Actions and Rationale of the Strategy for support local animation production

A. Financial Sponsorship for Local Production

In terms of the first action, the Theoretical Model suggests that a significant mechanism of support for the local animation industry is sponsorship of local production, particularly by a government body. Government support through financial sponsorship is stronger than that provided by a private body, and according to findings of this research, at the Growth stage, the animation industry still needs generous financial support to enable it to extend its potential, as firms within the industry have limited resources due to the moderate levels of local and regional demand. Continuing sponsorship from government bodies enables studios to increase their potential and capacity.

B. Fostering Regulations that Favour the Local Animation Industry

A further action that this Theoretical Model suggests in order to achieve support local animation production strategy is fostering regulations that favour the local animation industry. An example of this type of regulation is the allotment of prime time on local television channels for the broadcast of local animation production. Displaying a program in prime time enables it to be viewed by the largest audiences. These high audience numbers are then likely to attract private companies to sponsor these productions to advertise their brands, which in turn will provide these local animation productions with more support than they are likely to receive if displayed at off-peak times.

6.1.4 Strategies for the Mature Stage

As illustrated in Figure 31, the Mature stage Condition Cycle shows that the Mature animation industry has availability of workforce with high competent, excellent production quality, high international demand, many firms compete in the market with a high capability. However, in spite of this condition, the stability of the industry may become fragile, which can result in a move towards a Decline stage. One of the most common problems is that it may be threatened by cheaper competitors. These competitors could be from another Mature industry, such as Canada and France where both offer tax regulation that attracted international producers and partners to their local animation industry. Whereas less Mature overseas countries such as India, Korea, and the Philippines have large quantity of skilled workforce that costs are lower. (Kenny et al, 2011). In order to prevent a Mature industry from reaching the Decline stage, the Theoretical Model suggests adopting particular strategy, which is *sustain local animation production*. This strategy will be discussed in more details below.

6.1.4.1 Sustain Demand for Local Animation Production

The rationale for this strategy is to ensure that there is continuing demand for local animation productions. To accomplish this strategy, the Theoretical Model offers two actions, which are fostering supportive regulation to encourage continuing, sustainable demand on local production and providing financial aid for locally produced animation. Figure 37 shows these actions and a details description will be presented in the following.

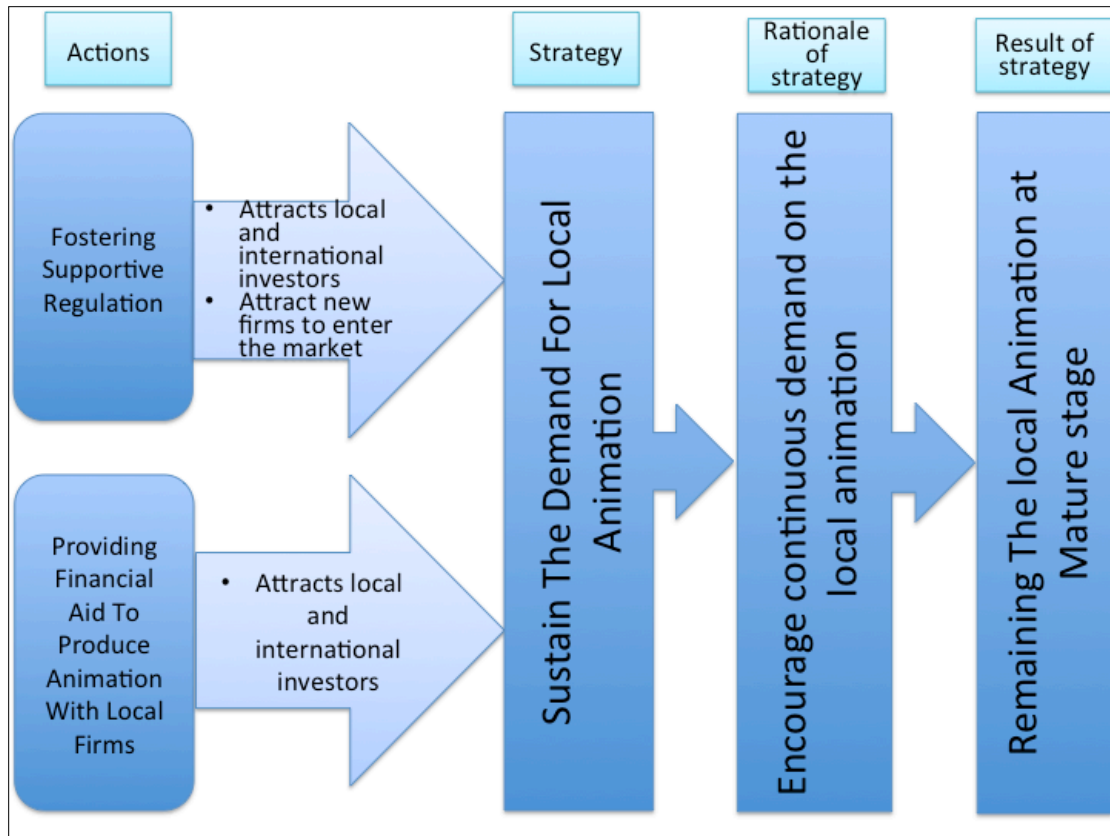


Figure 37: Flowchart of the Actions and Rationale of the Strategy for sustain the demand for local animation

A. *Fostering Supportive Regulations*

In terms of fostering supportive regulations, there are several forms of supportive regulations employed in different countries to encourage demand for local animation production during a Mature life cycle stage. (see section 6.1.3.2). These regulations have shown great success in increasing demand for local production in certain countries such as Canada and France (Coughlan, 2010). This is because these schemes attract international investment from firms seeking to benefit from such financial support through commissioning animation projects, or co-producing with animation firms, based in these two countries. Consequently, the demand for local

animation production has increased, which assists local firms in continuing their excellent production. Thus, this Theoretical Model incorporates fostering supportive regulations to increase demand for local production, to protect the industry from falling into the Decline stage.

B. Providing Financial Aid to Produce Animation with Local Firms

Another action that the Theoretical Model suggests undertaking in order to achieve sustain local production strategy is providing financial aid to firms that produce animation with local facilities. Since producers who seek to produce animation may commission their projects to overseas animation studios for financial reasons such as low-cost workforce, this form of financial aid will encourage them to commission local animation studios for their projects in order to benefit from this aid. Consequently, the demand on local animation studios will increase, increasing profits for local animation firms, allowing them to improve their capacity and capabilities. Such financial aid attracts film writers, directors, and producers to commission local animation studios for their film production processes to get this aid. As a result of the increase in demand this drives, local animation firms will receive more resources, enabling them to improve their capabilities. Thus, the Theoretical Model suggests undertaking similar actions in order to encourage local production.

6.2 Application of the Strategy to the Saudi Animation Industry

In the previous sections, the study presented a Theoretical Model that included a range of effective strategies to assist the evolution of the animation industry life cycle at the different stages. In the following sections, application of these strategies to the Saudi animation industry will be presented.

6.2.1 The Application of Strategies for the Introduction Stage

The suggested strategies for the Introduction Stage of the animation industry life cycle are as follows:

- Develop a competent workforce
- Facilitate industry entrants

6.2.1.1 Developing a Competent Workforce

The strategy that targets the Introduction stage stresses the development of a competent workforce. Based on the findings of this research (see section 4.5.1), one of the main barriers the Saudi animation industry faces is a lack of skilled workforce in general, at any level of competence. This is because, in Saudi Arabia, there is a shortage of skills providers; higher education here only started to offer courses on subjects relating to the animation industry in the late 2000s, while full-time animation degree programmes were not offered until the 2010s. Due to this shortage of qualified workforce in the animation industry in Saudi Arabia, the strategic emphasis must be on preparing a competent workforce by undertaking the following actions:

- Recruit international and local industry professionals to deliver these courses;
- Embed industry engagement in course curricula;
- Use industry standard facilities to deliver these animation courses

6.2.1.1.1 Recruiting International and Local Industry Professionals to Deliver Courses

Findings from Saudi higher education institutions demonstrate that there is an absence of teaching staff specialising in animation; most of them have only a passing knowledge of animation, despite holding postgraduate degrees such as Masters and PhDs in related creative subjects including graphic design, multimedia, or digital art (see section 4.1.2). This absence of specialist professional teaching staff is one of the main challenges that higher education institutions in Saudi Arabia face. This absence of specialist knowledge and competencies has a circular effect, as these institutions continue recruiting students who have graduated from them to teach animation courses in spite of the fact that they have had no means of developing further knowledge. This is because in Saudi Arabia academic staff are required to have degree qualifications that include Bachelors, Masters, and Ph.D. degrees (Ministry of Education, 1998). However, comparisons with data collected from the multiple case study countries demonstrates that the higher education institutions there recruit teaching staff with industry backgrounds and that most of these tutors combine filmmaking and teaching at the same time (see section 5.1.2.1). This then plays a role in providing students within these countries with core competencies and skills, as they learn directly from industry expertise (Attwell & Brown, 2001). Therefore, this study recommends the recruitment of local Saudi animation filmmakers with extensive experience in animation filmmaking to hold positions on the teaching staff, even if they do not have postgraduate degrees. If necessary, they could teach the practical aspects while academic staff with postgraduate qualifications teach more theoretical subjects. A further recommendation based on this strategy involves recruiting regional industry professionals from Arabic countries such as Egypt, the Emirates, Syria and Jordan, who would speak the same language as Saudi students, facilitating learning.

In addition, Saudi university institutions could sponsor local animation filmmakers with industry experience to gain postgraduate qualifications from more advanced institutions such as those in the UK, Canada, or the US in order to meet the criteria that Saudi education ministry have set as conditions for academic staff.

6.2.1.1.2 Embedding Industry Engagement in Course Curricula

Animation courses should be focused on developing a highly skilled workforce and providing students with employability skills as well as subject knowledge. Therefore, embedding industry engagement such as co-projects and placements in course curricula is required to ensure that students are equipped with the skills they need to contribute effectively as new employees within the animation industry. Although the industry engagement approach is applied in Saudi Arabia in some higher educational courses that prepare students to work, such as the training for school teachers that enables students to undertake placements in schools, it seems to be difficult to apply this strategy in animation due to scarcity of animation firms. Therefore, this strategy recommends establishing incubation centres within higher education institutions to support start up animation and creative firms set up by graduates and entrepreneurs. These start-up firms will then collaborate with the animation courses, and such collaboration will allow students in their early levels to undertake co-projects and placements within new animation firms (more details will be presented later in this chapter, in the subsection *Establishing specialist incubation centres*). In addition, government bodies should also collaborate during the Introduction stage in order to assist with industry engagement, particularly in light of the fact that there are few animation firms currently active in Saudi Arabia. For instance, the student could produce an animated instructional short film to be used to communicate

announcements for government bodies or in relation to specific events, such as the Hajj or Ramadan.

6.2.1.1.3 Using Industry Standard Facilities to Deliver Animation Courses

Findings from the Saudi case study, in particular the data that was collected from higher education institutions, demonstrates that students are taught using facilities that are insufficient for delivering a full animation course, and which are much lower than the industry standard. For instance, students use old versions of computer hardware that are not fast enough for the rendering process, as well as using very basic creative software that is not appropriate for making modern animated films. In addition, the classrooms are not equipped with the latest learning resources such as projectors and smart boards that facilitate teaching more efficiently. These limited facilities result in students acquiring basic knowledge that is not up-to-date. As knowledge and skills within animation require regular updating, using old versions of equipment could affect students' ability to work efficiently due to a lack of competence. The strategy recommends that improvements should be made to the facilities for creative industry courses in general, and animation courses in particular. This improvement requires offering better-equipped computer labs with large capacities and more advanced hardware that are suitable for running intensive graphical and animation software. Moreover, each computer should be provided with a creative package of modern software such as Adobe Creative Suite and a variety of advanced animation software for 2D and 3D work. This variety of software will assist in the widening of students' skills, helping them become familiar with the different brands of software they may be asked to use in the workplace, increasing their potential and enabling them to achieve a high level of competence. Moreover, specialist studios that support

animation production should be provided, including editing studios, recording studios, green screen areas, and stop-motion studios. These specialist studios will enable the students to develop their animation film making skills and knowledge with practical experience.

6.2.1.2 Facilitating Industry Entrants

Another strategy that this research proposes for the Introduction stage is facilitating industry entrants. The study's findings demonstrate that, in the Saudi animation industry, there are only a few firms that have managed to enter the market. This is because there are high barriers that prevent market entry. These entry barriers include capital requirements, due to the high costs that the animation industry generates; uncertainty, due to lack of demand for Saudi production because of cost advantages held by more established producers; and a lack of entrepreneurship knowledge. These entry barriers have been discussed in more detail in Chapter Four. To accomplish this strategy, the research suggests considering the following actions:

- Embedding entrepreneurship education;
- Establishing specialist incubation centres; and
- Cultivating networks and distribution channels

6.2.1.2.1 Embedding Entrepreneurship Education

One of the actions that should be undertaken to facilitate industry entrants is embed entrepreneurship education within animation courses in higher education. To apply this action to Saudi higher education, the strategy suggests the following

recommendations: Firstly, incorporate entrepreneurship concepts within the course's modules. This incorporation will provide students with some basic knowledge about entrepreneurial skills. Secondly, add some business modules as optional modules at a more advanced level within the animation course to provide a deeper knowledge of business and enable students to build a strong background in the business field. Thirdly, deliver non-credit activities to current animation students and graduate students, such as entrepreneurship workshops and lectures. These non-credit activities would usually be delivered by industry professionals and the new business starters that have benefitted from the incubation centre (see the next section), thus providing a realistic picture of how students can start a business and what sort of challenges they may face.

6.2.1.2.2 Establishing Specialist Incubation Centres

Another action that this study suggests undertaking in order to facilitate industry entrants is establishing specialist incubation centres. The Saudi animation industry faces high entry barriers that include extensive capital requirements due to the high costs of creating animation; uncertainty due to a lack of demand for Saudi production because of cost disadvantages; and a lack of entrepreneurship knowledge. However, providing incubation for Saudi animation entrepreneurs will assist in diminishing these entry barriers. The strategy recommends establishing a number of incubation centres within higher education institutions that offer animation courses. These incubation centres would collaborate with the animation programmes and provide different services, depending on the entrepreneur's level. For new graduates or talents who seek to enter the animation industry, the service provided by the incubation

centre would include free office space with many of the essential business requirements such as an Internet connection and basic equipment. In addition, they could gain free access to a number of shared professional pre-production, production and post-production labs if booked in advance. These services aim to reduce the capital requirements for entrepreneurs and thus enable them to produce small animation projects. Entrepreneurs that have already started their own business could also be provided with low-cost office space and low-cost semi-private pre-production, production, and post-production labs (see section 5.3.1.2).

Another service that incubation centres provide is access to free supervision teams with animation industry expertise, who can provide creative feedback related to the quality aspects that enables graduates and talents who join the incubation centre to identify the defects that make their productions less well developed. Further services that seek to overcome a lack of entrepreneurial knowledge include access to free business advice services such as business planning and business analysis. As mentioned in the beginning of this subsection, these incubation centres would be established within the higher education institutions where animation course are taught because, in addition to supervision, these incubators also encourage collaboration, to enable students to undertake placements and co-projects with the firms that benefit from incubation, and the provision of role models through encouraging participants in the incubator to deliver entrepreneurship lectures and workshops for the University student as non-credit activities.

6.2.1.2.3 Cultivating Networks and Distribution Channels

In the Saudi animation industry, there is an absence of distribution channels due to the weakness of its infrastructure. This absence and weakness are considered some of the main entry and mobility barriers that prevent new firms from entering the Saudi animation industry. Thus, to support animation entrepreneurship, it is essential to overcome these issues through cultivating networks and distribution channels that play the role of mediators. In particular, as the Saudi animation industry is still in its Introduction phase, the strategy recommends launching annual animation festivals at the local level in different cities within Saudi Arabia. Animation festivals involve a temporary agglomeration of firms that encourages networking among new entrants, professionals, and interested third parties. The strategy suggests that these festivals target talents from different age groups with competitions, including those for children, as well as events designed to enhance creativity in the young generation. In addition, animation studios also can participate in these festivals to encourage competition among them; thus, these temporary agglomerations can become effective channels for knowledge diffusion. Due to the weakness of the animation industry infrastructure in the current Introduction stage of the Saudi animation industry, these animation festivals should take place within higher education institutions, as there is availability of conference facilities within most Saudi universities. However, when the Saudi animation industry reaches its Growth stage, this Theoretical Model suggests establishing a Media City that would include appropriate facilities to hold big events such as animation festivals (see section 6.2.2.1).

Alongside launching animation festivals, the study recommends activating networking between members of animation industry organizations in Saudi Arabia.

As clarified in Chapter Four, there are a number of organizations within the Saudi animation industry (see section 4.1.6). Although these organisations, which come under the umbrella of the Ministry of Culture, arrange networking events such as galleries, symposia, and workshops, there is an absence of activities that target the animation industry as these organisations are more concerned with other creative industries such as theatre, photography, sculptures, calligraphy, and caricature. Therefore, the study recommends launching a formal network that will specialise in animation, allowing members to have a number of meetings throughout the year to discuss different issues related to the Saudi animation industry. According to the study findings (see section 5.2), formal networks are more effective in the Introduction phase when the industry needs lots of support from strong authorities such as the Ministry of Culture due to the weakness of its infrastructure and the absence of distribution channels. Informal networks are more appropriate for Growth and Mature industries, as they have advanced infrastructures that can facilitate these type of informal networks including the availability of creative clusters such as media cities where individuals from different industry stakeholder organisations can meet face to face. The study recommends that the initial formal meetings would involve different activities that encourage interaction between network members such as workshops, master classes by those with industry expertise, screenings of the latest animated international films followed by discussion panels to examine significant aspects such as story and techniques used, screening members' animated experiments and projects, and giving feedback. It also recommends live streaming these meetings for those network members who are unable to attend. Interactive online activities between network members also make online networks more effective in terms of knowledge diffusion (see section 5.2.2). For example, setting a particular time,

whether weekly or monthly, for live chat through the network web page to enable members who cannot meet face to face to discuss any issues related to the animation industry can help to compensate for a lack of live networks.

6.2.2 Applications for the Growth Stage

The designed strategies for the Growth stage are the following:

- Developing stimulation infrastructure
- Support local production

6.2.2.1 Developing Stimulation Infrastructure

The Theoretical Model suggests developing a stimulation infrastructure as a strategy to assist the animation industry in moving from its Growth to its Mature stage. The rationale of this suggestion is because of the role that infrastructure plays in encouraging knowledge diffusion, which in turn assists the evolution of the industry life cycle. In the application of the Theoretical Model for the Introduction stage, the focus was on preparing the animation workforce and facilitating firms entering the animation industry in Saudi Arabia; however, in the Growth stage, the Saudi animation industry needs to be improved further by developing a stimulation infrastructure. From the findings of the Saudi animation industry that were presented in chapter Four, it is clear that there is an absence of such infrastructure. In order to develop a stimulation infrastructure, two actions are suggested in the Theoretical Model:

- Creating a creative cluster
- Increasing distribution channels

The following subsections will present recommendations for the application of these actions to the Saudi animation industry.

6.2.2.1.1 Creating a Creative Cluster

While most of the media firms in Saudi Arabia are located in Riyadh and Jeddah, there is no media city or zone; each firm is located in isolation from the others. Moreover, most of the media firms rent their offices: even large firms such as TV channels rent properties that are not purpose-built with media facilities, often large villas with plenty of rooms, but little in the way of specialist architecture. In addition, there are a number of Saudi broadcasters that have based their headquarters abroad to benefit from the more developed infrastructures and facilities of, for example, the Emirates, Egypt, and Lebanon (Arab News, 2013). Thus, it is important to create a creative cluster in Saudi Arabia in the form of a media city. This study recommends that Riyadh, the capital city, is the most appropriate location for this media city for two reasons. The first is that it is already one of the two Saudi cities that host many different media industries' firms. Secondly, it hosts the headquarters of the General Commission of the Audiovisual Media, which has just moved to the Al Nakhil area in the north of the city. This strategy suggests that establishing a media city in the Al Nakhil area in the north of Riyadh city could take advantage of the massive area available close to the General Commission of the Audiovisual Media, which could then invest in the establishment of an outstanding media city (see Figure 38).



Figure 38: Riyadh city map

This location also is close to King Saud University and Princess Norah University, which would facilitate student transport during placements. In addition, King Khalid International airport is not far from this area, which will facilitate those from further away reaching this media city, as well as offering logistical services for investors from outside the city.

The Saudi media city should offer a competitive environment that stimulates productivity while at the same time being convenient to live in. To attract media firms, it should offer a variety of low cost, high standard, well-equipped office spaces that suit a range of small firms, such as production firms, as well as spaces for large firms such as TV broadcasters. These office spaces should include high speed internet networks to facilitate communication between firms and individuals.

In addition, to make this media city more competitive, firms located within it should have free or subsidised access to specialised facilities such as green screens, editing studios, and recording studios, as well as the opportunity to avail themselves of low-cost long-term accommodation and leisure services, which should attract local, regional, and international industry stakeholders to benefit from these advantages by allowing them to work and live within the media city, making their work more convenience. According to the findings of this research, a convenient location is important to some extent at all stages. In a more Mature industry, studio managers prefer to base their firms near where they live (see section 5.4).

In addition, it is essential to provide conference and meetings facilities, such as large halls and film theatres, to host events for the media industry such as animation festival and media market places. The availability of conference and meeting facilities within the media city will make it more efficient for media firms to launch, attend or participate in these events, removing any transport difficulties. An experienced event management service provider that can manage and provide additional event equipment, such as stands and screens, should support these conference and meeting facilities.

In addition, to facilitate visitors to this media city from outside Riyadh, the media city should have sufficient hosting facilities such as variety of hotels, short-term rental apartments, and plenty of local service such as cafés, restaurants, and shops. Furthermore, this media city should provide logistical services that facilitate the regional and international investors' business, such as providing them with the essential requirements for obtaining visas and making business inquiries.

The development of these facilities would attract international and regional animation firms to invest in Saudi Arabia, bringing great advantages to the local animation industry by allowing interaction with firms operating at a more advanced level than the local one. The proximity of these international and regional firms with Saudi firms will allow knowledge diffusion as they share local services within the media city in daily face-to-face interactions. This is likely to enhance the chances of co-production between them and will encourage local firms to improve their potential to work with, and compete with, those regional and international firms.

6.2.2.1.2 Increasing Distribution Channels

The second action that should be undertaken to develop a stimulation infrastructure for the Saudi animation industry is increasing the distribution channels for the animation industry. In Saudi Arabia, there is an absence of distribution channels for the animation industry, which has affected its development. This because an absence of distribution channels hinders animation makers in terms of marketing their productions to local buyers and stops them from finding sponsors, developers, or producers. Thus, the launch of two animation marketplaces in Saudi Arabia annually is a start to addressing this issue. One of these should be for local firms, while the other one should include regional and international firms as well.

These marketplaces should be only for animation, in order to spotlight it rather than combining it with other media such as live action TV drama, since the latter are

already more developed in Saudi Arabia. Launching this type of distribution channel will allow local Saudi animation makers to find producers, partners, developers, and sponsors for their animation. It will also increase the competition between the Saudi animation makers and between the Saudi makers and other regional and international firms. These two animation marketplaces should be launched in the media city that was suggested in the previous section in order to facilitate the animation firms' and industry stakeholders' attendance and participation; this is based on the findings of this study that showed that distance could prevent stakeholders from participating due to the busy schedules of people working within the animation industry. To attract local firms, participation fees for this animation marketplace should be minimal or removed entirely. Such subsidised entry will encourage participation within this media market place, and because the animation industry is still in its Growth stage, the Saudi government should feel justified in providing this extra support to the animation industry.

It is important that the animation marketplace includes a summit where key buyers such as TV channels can discuss what sort of programs they are looking for with the makers. This will assist these makers in becoming aware of the criteria and the requirements that attract these key buyers; this is based on the findings of this study from the Saudi case that showed that local Saudi television channels are not satisfied with the content of local animation productions. This interaction between buyers and the creators will encourage networking and facilitate distribution channels for the local animation industry.

The international animation marketplace that this study suggests should attract regional and international participants and buyers with its competitive prices on entry fees. The media city logistical services should also facilitate travel requirements such as obtaining visas and low cost accommodation within the media city for foreign firms. Attracting international and regional participants and buyers encourages networking with local ones, which in turn will result in knowledge diffusion. Furthermore, it will enable the local animation makers to show their potential to non-local industry stakeholders and thus have the opportunity to find appropriate partners for co-production.

6.2.2.2 Support Local Animation Production

The second strategy that the Theoretical Model recommends for moving the Saudi animation industry from its Growth stage towards its Mature stage is to support local firms. The aim of this support is to assist the local firms in improving their potential and capabilities through providing them with financial resources. In the Introduction stage, the support provided for local firms was designed to facilitate industry entrance, and this required establishing incubation centres within higher education facilities offering animation courses, to minimise the capital requirements on new graduate entrants to the Saudi animation industry (see section 6.1.2.2). However, as mentioned earlier (see section 6.1.3.2), the support strategy for the Growth stage involves two different actions:

- Financial sponsorship for local production
- Fostering regulations that favour the local animation industry

An application of these actions to the Saudi animation industry will be presented below.

6.2.2.2.1 Financial Sponsorship for Local Production

Findings from the Saudi animation industry showed that the absence of sponsorship for local production is one of the most difficult barriers for industry makers. Therefore, this study recommends that the Saudi Ministry of Culture, represented by the Saudi Broadcasting Corporation, should supplement their funding of governmental Saudi television channels with an additional specific budget for producing animation in conjunction with local firms. In particular, this budget should target the Ajyal Channel, which is aimed at children, because most of its content is animation. However, Saudi Channel One and Two also display some animation content for the family, and should therefore receive some of this budget. This budget should be different to that given to produce TV drama, which already receives a specific budget annually. This financial sponsorship would assist these television channels to be able to commission local studios to develop high quality animation content by providing sufficient budget to hire a large number of qualified animators, professional scenario writers, experienced directors, and famous actors to voice the characters. This will encourage the demand on the local animation industry to increase. In addition, the competitiveness between local animation studios will increase, as this demand will motivate them to improve the quality of their productions to meet the level that local channels request their criteria for the animation broadcast on their channels.

6.2.2.2 Fostering Regulations that Favour the Local Animation Industry

This action requires the Saudi government to create supportive regulation that favours the local animation industry; currently, interviews with Saudi television channels showed that they depend on imported and outsourced animation. This reliance on imported and outsourced production is challenging for local animation makers and deters them from continuing within the industry by placing them in competition with experienced production firms, from the regional market such as Egypt, and the international market, such as India. However, regulation in the form of allotment of prime time to local animation production would encourage the Saudi government and private channels to broadcast local production, and encourage sponsorship of local animation rather than outsourcing. This type of regulation has had a great impact on the Korean and Chinese animation industries, as discussed earlier in this thesis.

In particular, it is recommended that this regulation is initially applied in the month of Ramadan, which is prime time for television in Saudi Arabia. Television channels compete to attract commercial advertising that sponsors the different programmes that are screened during this month. Requiring all the Saudi channels to screen at least one locally produced animation series daily during Ramadan would allow these channels to put more budget into a local animation programme rather than importing a number of programmes. The income from commercial advertisements would also assist in covering the production budget, as in Ramadan, commercial advertisements compete to be displayed in prime time. Later, this regulation should be extended to cover the whole of the year: all local Saudi channels should display at least one local animation programme daily. At a later stage, when the industry is sufficiently developed, the regulation could be adjusted to a requirement that 10% of all animation shown is from

local production. By imposing this regulation, the government could ensure that Saudi animation makers receive continuing demand, as there are 86 private channels including 5 television channels for children. This increase in demand would provide local animation makers with additional financial resources that would enable them to improve their capabilities.

6.2.3 Application for the Mature Stage

The Theoretical Model also offers a strategy to assist the animation industry with support at the Mature stage, to prevent it from falling into the Decline stage. This strategy is to sustain the demand for local animation production.

6.2.3.1 Sustain the Demand for Local Animation Production

This strategy has been designed to keep up the continuing demand on local animation when it reaches its Mature stage (see section 6.1.4.1). This is because demand plays a major role in preventing any industry from falling into the Decline stage. As discussed earlier (see section 6.2.1), the focus at the Introduction stage is on preparing qualified labour and facilitating its entrance into the industry. Then, at the Growth stage, the focus is on creating an appropriate environment to support the existing market through providing an excellent environment and distribution infrastructure and improving their capabilities through knowledge diffusion and co-production (see section 6.2.2). These strategies mean that there will be a sufficiently qualified workforce and a good number of established firms within a competitive infrastructure at the Mature stage. However, at that point, the Saudi industry could be threatened by regional competitors such as Egypt and the Emirates, or by cheaper competitors such

as Asian countries, or even by imported international animation from key brands such as Disney and Aardman. Thus, the Theoretical Model suggests that sustaining Saudi animation production to ensure it remains in the Mature stage would involve two actions:

- Fostering supportive regulation to encourage continuing sustainable demand on local production
- Providing financial aid to attract the production of animation locally

These regulations and financial support would build on and develop the principles established in the Growth stage.

6.2.3.1.1 Fostering Supportive Regulation

To ensure continuing sustainable demand on local Saudi production in its Mature stage, the Saudi Ministry of Culture, represented by the General Commission of Audiovisual Media, should foster supportive regulation to increase demand on local animation makers. It was suggested in the final part of the Growth stage that all local channels should take at least 10% of their animation programming from local production (see section 6.2.2.2). At the Mature stage, this should be extended by expanding the requirement for locally produced animation from 10% to 25%. This action would force all Saudi television channels to buy more local animation production. In addition, this regulation would encourage Saudi television channels to commission local animation studios to produce animation content specifically for them. This would easily create continuing demand for local animation studios, which plays a significant role in creating a sustainable financial source to fuel local animation industry makers' development. The competition between the local channels

to produce animation at a high level to attract larger audiences will encourage them to increase the budgets that they use to commission local animation makers. This regulation will also encourage the participation of local animation makers and buyers in the Saudi animation marketplace as discussed under the applications for the Growth stage (see section 6.2.2.1). At the same time, this will lead to increase in the competition between Saudi animation makers and encourage them to improve their production to win deals with the local channels.

6.2.3.1.2 Providing Financial Aid to Attract Production of Animation Locally

The second action that is required to sustain the Saudi animation industry in its Mature stage is providing financial aid to attract the production of animation locally. This action involves an allotment of financial aid to cover a particular percentage of the production costs of any animation programme developed with Saudi animation makers. This would also apply to co-production with Saudi animation makers. Providing this type of financial aid in Saudi Arabia will attract local, regional, and even international producers to work with Saudi animation makers including animation studios, animation directors, and animation scenario writers.

As the Saudi audience makes up the majority of the regional satellite television channels' viewers (Arab Media Outlook, 2015), there is a high expectation that regional animation makers should seek to produce animation content that targets the Saudi audience. Therefore, co-production with local animation makers will assist with the production of content that will engage and touch the Saudi audience, due to the fact that local industry makers have a more in-depth understanding of Saudi characteristics, culture, sense of humour, and what is acceptable to Saudi morality. As

the findings of this study show, co-production has been undertaken between Cartoon Network Arabia and the Emirates animation studios to produce '*Mansour*', an animation series that represents the regional culture and environment of GCC countries. Such co-productions between international broadcasters and local Saudi animation makers would be likely to develop more substantially if the Saudi industry stakeholders could offer competitive bids. There has also been an increase in the number of international channels that have started to broadcast an Arabic or Middle Eastern version of their channel to the Middle East and North Africa area, including Cartoon Network Arabia, Nickelodeon Arabia, Disney, and currently CBeebies. As part of their Arabic provision, these firms are increasingly engaging in co-production projects, and at the Mature industry stage, co-production must be encouraged to sustain demand for home production of animation through engagement with international production sources and channels, while retaining a Saudi cultural focus.

6.3 Evaluation

This section will present an evaluation of the recommendations for the Saudi animation industry and the strategies developed by this study. The aim of the evaluation is to assess whether these recommendations and strategies are appropriate for the Saudi animation industry. Obtaining this evaluation involved contacting key stakeholders from Saudi Arabia via email and telephone and engaging them in conversation about the recommendations. These key stakeholders were: Omar Abu Baker, official speaker of the Saudi Commission of Audiovisual Media; Fahd Dumiaty, the manager of the Saudi Broadcasting Corporation; Muna Alzahrani, animation lecturer at the Electronic Art Department from Taif University; and Muhamed Alutaim the official speaker of the Saudi Society of Culture and Art.

Feedback from these experts on the recommendations and actions suggested for the different stages will be presented. This feedback will enable the researcher to begin validation of the strategies for each stage.

6.3.1 Evaluation of the Introduction Stage Strategies, Actions and Recommendations

For the Introduction stage the researcher developed two main strategies: *Developing a Competent Workforce* and *Facilitating Industry Entrants*. Each strategy required a number of actions and came with particular recommendations for the Saudi animation (see section 6.2.1).

The first strategy required three actions, and in the following segment, feedback on each action and its recommendations will be presented, followed by an assessment of this strategy. This feedback was given by Muna Alzahrani from the Electronic Art Department from Taif University in Saudi Arabia. She is a lecturer who has an MA in animation from the UK and she teaches the animation module and is actively interested in developing it.

In terms of *Recruiting International and Local Animation Professionals to Deliver Animation Courses* (see section 6.2.1.1.1), Alzahrani agreed with the action. However, she commented on the recommendation that the researcher had made for the Saudi case that international professionals be recruited to teach animations course as well as local professionals. The respondent clarified the advantages of both international and local professionals, and suggested that it would be more effective to recruit international professionals from countries with developed advanced animation

industries such as Canada and the UK as the main teaching staff, while local professionals act as assistant teaching staff. This is because those experts from an international background have more advanced experience, which could also allow local staff to improve their skills through working with them. In addition, the respondent added that local professionals are still required, as they are aware of the needs of the local community. This feedback provided helpful insight into the recommendations made for this action by clarifying the advantages of both international and local professionals. Thus, the researcher modified this recommendation by clarifying the specific roles for professionals: recruiting international professionals as main teaching staff, with each having an assistant teacher from among local professionals. This modification of the recommendation would not affect the general nature of the action, which demonstrates that the action could be applied.

With respect to *Embedding Industry Engagement in The Course Curriculum* (see section 6.2.1.1.2), the researcher had suggested that students should take on co-projects and placements. The respondent strongly agreed with this action. She stated that students would benefit from practicing their skills in a real work environment, and added that, currently, her department is planning to change its course plan by adding a module that allows students to gain work experience. The department will thus collaborate with private and government organisations to prepare students for the work environment. This feedback is consistent with the recommendation suggested by the researcher, which required students to undertake co-projects and placements, and it is therefore positive to find that this recommendation is already under consideration to be adopted. This supports the outcome of this study that suggests applying an

industry engagement approach to the delivery of animation programmes to enhance student employability skills. Thus, this recommendation and action are accepted without modification.

Regarding *Using a High Standard Facilities to Deliver Animation Courses* (see section 6.2.1.1.3), the researcher had recommended that Saudi institutions offer computer labs with large capacity and a variety of specialised software, as well as providing students with versions of the specialised software packages on their own laptop. The respondent agreed with this action in general, as she believes that the quality and quantity of facilities is one of the problems that affects course outcome. She agreed with offering a computer lab with large capacity and a variety of specialised software, and added that her department planned to contact suppliers that specialise in animation hardware and software to provide them with updated facilities for the next academic year. However, she believed that providing students with specialised software on their own laptops would be difficult for the department's budget. She explained that because enrolment in this university is free, as in most of the universities in Saudi Arabia, the budget is small compared with universities that require fees such as the UK or Canada, who have more advanced facilities. Thus, she argued, it is difficult to apply such generous solutions. Although the feedback suggested that providing students with updated software packages on their laptops was not feasible because of the budget issue, the researcher argues that this viewpoint could vary in different cases. If this suggestion could be discussed with higher authorities such as the Ministry of Education, it may receive more positive feedback. This investment in students would bring advantages by the time they graduate and become employees, as it would provide them with more flexibility and easier access

to the software, enabling them to develop their skills to a much greater degree. This feedback does not affect the action in general, as it only disagrees with one of its recommendations. Thus, this action and recommendations could be taken without modification.

The overall feedback for the first three actions and recommendations were positive. Although minor modification to some recommendations are required, this would not affect the main strategy that requires these actions to be taken, which remains *Developing a Competent Workforce*. This provides validation for this strategy.

The second strategy for the Introduction stage is *Facilitate Industry Entrants*. This strategy also requires three actions, and feedback regarding each action and its recommendations will be presented below, followed by an assessment of this strategy. As with the first strategy, the feedback on the first two actions was given by the representative of the Electronic Art Department from Taif University in Saudi Arabia, Muna Alzahrani. Feedback on the third action was given by Muhamed Alutaim, the official speaker of the Saudi Society of Culture and Art.

With respect to *Embedding Entrepreneurship Education* (see section 6.2.1.2.1), the researcher suggested particular recommendations for the Saudi case, including incorporating entrepreneurship concepts within course modules; incorporating business modules as optional modules at a more advanced level within the animation course; and delivering non-credit activities such as workshops in entrepreneurship by guests from the industry to animation students. Alzahrani agrees with these actions, as she believes that these will provide students with knowledge that could enable them to

start their own businesses. However, she indicated caution when incorporating entrepreneurship concepts and business modules into the course. She argued that it required collaboration with the business department to design a model that is appropriate for students who are not familiar with business concepts and theory, which will take time to apply. The non-credit activity could be applied, but this requires agreement and collaboration with industry stakeholders. This feedback indicates that this action could be applied, but that more time is required for it to be implemented fully due to the need for collaboration with the business school. This adds to the time and effort required to design and organise modules for students who do not have a background in business. On the other hand, the other recommendation that this study suggested, adding non-credit activities such as workshops and master classes delivered by people from the industry, could be adopted more quickly.

With regard to *Establishing a Specialised Incubation Centre* (see section 6.2.1.2.2), the researcher recommended that this incubation centre be located on university campuses to enable collaboration between animation programmes and firms within the incubation centre. These incubation centres provide new entrepreneurs with free office space with Internet connections and free access to a number of shared professional pre-production, production and post-production labs that enable them to be used at a particular time, as it must be booked in advance. Alzahrani agreed with these actions. In terms of the recommendation, she agreed with it overall, as she believes that it will facilitate students' engagement with industry. However, she added that such a project needs time and a dedicated budget to accomplish. She argued it would therefore be difficult to provide everything that this study recommended. Alzahrani suggested starting with free office space only, while allowing incubation

members to have access to department facilities, including computer labs with the appropriate creative suite of software rather than special facilities for the incubator. She pointed out that this would enable the university to invest more into high standard facilities that can be used to teach animation as well as being used by incubation members when not in use by students. This disagreement with the initial recommendation would not change the proposed action, as establishing incubation centres could still be carried out based on the first recommendation of free office space. However, the suggestion that the respondent gave could add further advantages by allowing the university to put more investment into upgrading the facilities used by students to professional standards so that they could be used by incubator members when not being used by students.

In terms of *Cultivation Networks and Distribution Channels* (see section 6.2.1.2.3), the researcher had recommended launching an animation festival to support and focus on Saudi animation makers. In addition, the researcher recommended establishing a formal network to connect people from the animation industry together and enable them to network via several meetings every year, focusing on a variety of activities including online interactions. In terms of the first recommendation, launching an animation festival, Alutaim agreed with this in total. However, he disagreed with the other recommendation, launching a formal special network for the animation industry only. He argued that the Saudi Society For Culture And Art is a formal network that is concerned with all forms of art and cultural industries in Saudi Arabia, and that this includes animation. Therefore, it would be difficult to launch a formal network that specialised in animation because of the need to obtain a special budget from the Saudi Ministry of Culture as the Saudi Society For Culture And Art has. He clarified that

the budget that the Society receives is very small, and that most of the activities that are run by this society are delivered by volunteers with skills in particular art forms such as photography and sculpture: he stated that the Society would welcome volunteers from the animation industry to arrange activities related to this art. Considering online activities, he commented that different platforms of social media, such as Snapchat, and YouTube, have been used as ways to interact by members when addressing various issues. This feedback indicates that this action is feasible, spite of the disagreement with one of its recommendations. This is because the disagreement is, essentially, only about the type of network; rather than launching a specialised network, animation activities could take a place alongside the activities run by the Saudi Society For Culture And Art. Alutaim indicates that this recommendation may be more appropriate for the industry at a later stage, however, as it requires the people who work in the animation industry to take the initiative to launch and run specialised events to connect them to one another and enable them to exchange knowledge.

The feedback regarding the above three actions was generally in agreement with the recommendations of this study. The slight modification resulting from the feedback affected some of the recommendations, but these modifications do not lead to changing the overall strategy of *Facilitate Industry Entrance*.

6.3.2 Evaluation of the Growth Stage Strategies, Actions and Recommendations

For the Growth stage, the researcher designed two main strategies, *Developing Stimulation Infrastructure* and *Support Local Animation Production*. In a similar

manner to the Introduction stage strategies, each strategy required a number of actions (see section 6.1.3).

Developing Stimulation Infrastructure requires two actions. Feedback regarding each action and the recommendations for the Saudi industry in its Growth stage will be presented, along with an assessment of this strategy based on the feedback received. This feedback was given by Omar Abu Baker, the official speaker of the General Commission of Audiovisual Media.

The action *Creating a Creative Cluster* (see section 6.2.2.1.1) involves establishing a Media City, and Abu Baker, agreed with this action in general. He revealed that the General Commission put a recommendation to the Audio Visual Investment Forum in December 2016 that included establishing a Media City in Riyadh. However, he added that the Saudi Ministry of Culture still needs to study this recommendation. The researcher had suggested a number of recommendations for the Saudi case, and the respondent pointed out that the suggested recommendations for the Media City that this study gave would potentially be valuable contributions. He approved the recommendations that involved offering low cost office space in a variety of sizes; offering free access to specialised shared facilities; providing conference and meeting facilities; providing hosting facilities including a variety of hotels, short term rental apartments, and plenty of local services such as cafés, restaurants and shops; and providing logistical services. However, he indicated caution in terms of the recommendation to establish long term accommodation for employees and leisure services. He argued that this particular recommendation would need a feasibility study to be approved, as it may not be economically viable. This response implies that

the reason for this disagreement is the fear that this recommendation would need additional funding. Thus, this recommendation could be considered at a later stage when the industry is generating additional revenue. Although there is a disagreement to some extent with one of the recommendations, this feedback does not affect the proposed action. This is because creating a Media City in Riyadh would be possible even without including long term accommodation and leisure services for the employees, as housing issues are not difficult to overcome in Riyadh thanks to the number of recent housing projects around the city.

Regarding *Increasing Distribution Channels* (see section 6.2.2.1.2), the researcher recommended establishing two marketplaces, one for local animation makers only, and the other one combining local and international animation makers. Abu Baker agreed with this action in general. He commented that this would enable local and international industry workers to network and interact, which would contribute to enhancing their strengths and experience. He believed that this would help the country to produce distinctive and productive work. However, he disagreed with the recommendation for two separate marketplaces. He said that it would be better to launch a single marketplace that targeted both local and international industry stakeholders at the same time. He argued that the number of local industry makers is not likely to be particularly large at the Growth stage, and that therefore a single marketplace would be more appropriate. In addition, combining the two would allow additional interaction and knowledge diffusion between local and international creators. This feedback has been considered and the researcher will modify the recommendation as suggested by the respondent. This modified recommendation will not affect the overall action of *Increasing Distribution Channels*.

The feedback given regarding the two actions in this segment was generally positive. Although there was a slight modification to some of the recommendations as shown above, these slight changes would not affect the general actions. Accordingly, they will not affect the strategy that required these actions, *Developing Stimulation Infrastructure*.

In terms of the second strategy for the Growth stage, *Support Local Animation Production*, two further actions are required. Again, feedback regarding these actions and recommendations will be presented before an assessment of the strategy is given. The feedback regarding the first action and its recommendation was given by Fahd Dumiaty, the manager of the Saudi Broadcasting Corporation, while the feedback on the second action and its recommendations was given by Omar Abu Baker, the official speaker of the General Commission for Audiovisual Media.

With respect to *Financial Sponsorship for Local Production* (see section 6.2.2.2.1), the researcher recommended providing a specific budget for producing animation with local firms. Dumiaty agreed with this action in general. However, he disagreed with the recommendation. He clarified that there is already a budget for local media production in general, including many different forms of programmes, and that this cannot be specifically targeted at animation. This is because the Saudi public channels, including the children's channel, display a variety of content that includes live-action and animation productions. He added that, rather than creating a specific budget for producing animation, it would be possible to sponsor local firms to produce animation content if these local animation firms offered excellent ideas that

were best made as animation content. He explained that this is because animation requires a large budget, and it would therefore be difficult to sponsor local firms if they could commission or outsource better content with their budgets. This response demonstrates that this particular recommendation is more ambitious than anticipated. The suggestion that the respondent gave may be useful in terms of gaining some support but it would not provide continuous support; as the respondent pointed out, they would sponsor only those firms deemed to have excellent ideas, making obtaining funding a difficult proposition due to the high level of competition that Saudi animation faces.

In terms of *Fostering Regulation That Favours Local Production* (see section 6.2.2.2.2), the researcher recommended the allotment of prime time on all Saudi TV channels to display local animation productions. This would be started by broadcasting one local animation content per day, then this could be extended to them broadcasting 10% of their animation content from local producers. Abu Baker agreed with this action; he said that fostering regulation could be an effective approach and would contribute to the identification of appropriate regulations and force TV channels to provide full support to institutions and production companies to help them produce high quality animation that could contribute to highlighting and conveying the culture of Saudi Arabia. He added that the General Commission for Audiovisual Media is currently studying several relevant topics and that this recommendation may be included in these studies. This agreement with the recommendation indicates that it could be applied and it does not require further amendment.

In the light of the feedback received, both actions appear to be appropriate. However, the recommendation for the first action was seen as unnecessary by the respondent. Structures for supporting local media industries, including animation, already exist, and, in combination with regulatory action to encourage support of the industry, these could be applied to fulfil this recommendation. Thus, the strategy of *Support Local Animation Production* is appropriate for the application.

6.3.3 Evaluation of Mature Stage Strategy, Actions and Recommendations

As presented earlier in this chapter (see section 6.1.4), for the Mature stage, this study designed a main strategy of *Sustain Demand for The Local Animation Industry*. This strategy required two actions: *Fostering Supportive Regulation* and *Providing Financial Aid To Attract Production Of Animation Locally*. In the following section, feedback regarding these two actions and their recommendations for the Saudi case study will be presented and an assessment of this strategy presented. The feedback regarding the first action and its recommendation was given by Omar Abu Baker, the official speaker of the General Commission for Audiovisual Media, while the second action and its recommendation was critiqued by Fahd Dumiaty, the manager of the Saudi Broadcasting Corporation.

In terms of *Fostering Supportive Regulation* (see section 6.2.3.1.1), for the Saudi case study at the Mature stage, the researcher recommended that all local channels should source at least 25% of their animation content from local production. Abu Baker agreed with this action, as he said it would encourage the local industry. In terms of the recommendation, he said it could be difficult to determine whether it

could be appropriate to apply or not, as 25% seems to be a high percentage for this expectation. However, the percentage that this study recommended for the Growth stage, which is 10%, could be used as a more cautious level. This particular recommendation has therefore been modified to suggest a gradual increase from 10%, as conditions allow. This modification does not affect the action itself.

With respect to *Providing Financial Aid To Attract Production Of Animation Locally* (see section 6.2.3.1.2), the researcher recommended providing financial aid to cover part of the production costs for any animation content produced in collaboration with a Saudi studio, directors, or team. This approach is intended to maintain regional and international networks and to cement the significance attained by the Saudi industry once it has reached its Mature stage. Dumiaty agreed with this action and the corresponding recommendation as well. He believed that this recommendation would be valuable because it would attract and encourage collaboration between Saudi firms and regional and international producers. He added that such collaborations would offer valuable experience to the local partner, improving their capabilities. Thus, this action and recommendation is retained without modification.

The respondents generally agreed with the two actions, although they sounded a slight note of caution in relation to one of the recommendations. Nevertheless, this caution was due to the difficulty in predicting the outcome of such an action at this time, as the respondent pointed out. The overall positive feedback indicates the validity of the *Sustain Demand For The Local Animation Industry* strategy that requires the two actions discussed.

6.4 Evaluation of the Theoretical Model

This section will present an evaluation of the Theoretical Model derived from the evaluation of the developed strategies and actions for each of the different industry life cycle stages highlighted in the previous sections. This study could not undertake an actual implementation of the Theoretical Model, although the researcher did obtain a qualitative evaluation of its strategies. Actual implementation of this Theoretical Model would involve collaboration with many different parties from Saudi Arabia, including the Ministry of Education, The Ministry of Culture, and The Saudi General Commission for Audiovisual Media and the Saudi Broadcasting Corporation. Such collaboration would require a long time to plan and arrange. Another aspect mitigating against undertaking implementation of this Model is that many of the developed strategies and actions also require a long time to apply and to see result, and the time allocated to the researcher was limited. However, in spite of these challenges, the feedback received was generally positive, as respondents agreed overall with the strategies and the required actions for each stage. Although slight changes have been made to some of the suggested recommendations, as noted in the previous three sections, these changes do not affect the overall actions. This demonstrates that the developed strategies are likely to be appropriate to apply at the different stages this study suggests. It can therefore be argued that the overall Theoretical Model is validated and could be implemented. Nevertheless, the researcher plans to do further research with the respondents regarding to test results of applying those recommendations that will be implemented more quickly. For instance, the respondent from the university pointed that out that the institution intends to apply some of the recommendations in the coming academic year, which will allow the researcher to gather data on the impact of this implementation.

6.5 Summary

This chapter presented the Theoretical Model for effective strategies at different stages of the animation industry life cycle. This involved bringing all the findings from the animation industry analysis for Saudi animation and the animation industries from the multiple case study countries together. It identified the condition cycle for the different stages of the animation industry life cycle and the barriers that shape these condition cycles. The researcher then collated all of the effective strategies identified from the data collected in this study, considered the requirements in each stage of the industry lifecycle, then applied the resulting Theoretical Model to the Saudi animation industry by providing recommendations appropriate to the current situation in the Saudi industry. In addition, the Theoretical Model was applied to explore how to assist the Saudi animation industry to transfer from the Introduction to the Growth, and then how to move to the Mature stage and remain at it. An evaluation of strategy and recommendations for each stage of the industry lifecycle based on the implications of the Theoretical Model was also given. This evaluation received positive feedback in terms of strategy, with some small modifications to the recommendations being suggested. These modifications have not affected the main strategy that this Model required, and the evaluation can therefore be said to have supported the validity of this Theoretical Model.

7 Conclusion Chapter

This chapter will summarise this thesis and present the findings and conclusions. Firstly, it will provide an overview of the research problem as well as the aims and questions. It will then present the study's findings and outcomes in response to the research aims, which will address the research questions. After this, it will go on to identify the original contribution to knowledge generated by this study. Furthermore, it will determine the limitations and strengths of this study and it will present its dissemination plan. Finally, it will make a number of suggestions for future studies.

7.1 Research overview

This study set out to investigate the Saudi animation industry from the perspective of industry development. Throughout this thesis, the research has sought to understand how the animation industry's life cycle evolved and developed from its Introduction stage through the Growth and Maturity stages. Previous studies (see section 2.2.3) identified four factors that have significantly affected the development of the local animation industry. These factors are Higher Education Institutions, Networks, Government and Location.

However, most of these studies were concerned with the effect of these factors on a Mature industry, such as those found in North America and Europe (Bryman, 1997; Tschang & Goldstein, 2004; Wesson, 2010; Westcott, 2011; Cole, 2014). Besides that, they focused on Growth industries in Asian countries, such as Korea and China, which have succeeded in developing their local industry as a result of long experience as an international outsource hub (Tschang & Goldstein, 2004; Wu, 2010; Yoon,

2010; Lee, 2011). Nevertheless, these studies have not dealt with the concept of industry life cycle or studied the factors that affect each stage. Very limited research has focused on less developed animation industries, such as animation in Arab countries (Al Rimawi, 2014). This study has thus argued that it is important to investigate these four factors at different stages of the life cycle, including within less-developed animation industries, in order to design a Theoretical Model of effective strategies for each stage of the animation industry life cycle.

In order to provide a comprehensive understanding of how the animation industry life cycle evolves, this thesis thus investigated the animation industry in different stages of its life cycle using a qualitative multiple case study approach. This study selected the United Arab of Emirates as an emerging Growth industry, Egypt as an established Growth industry and the UK as a Mature industry. Overall, this study sought to address the following questions:

1. Why is the Saudi animation industry still in its Introduction stage in spite of the continued demand for animation?
2. What are the most significant factors in the development of the animation industry life cycle?
3. What are the strategies that countries with animation industries in Growth and Mature phases have adopted for each factor to evolve the development of their indigenous animation industries?

The study thus identified three aims, which are:

1. To investigate the Saudi animation industry in order to explore the barriers that constrain the development of the Saudi animation industry life cycle.

2. To determine the factors that influence the development of each stage of the industry life cycle.
3. To develop a theoretical model of the animation industry life cycle with effective strategies for each stage.
4. To develop recommendations for the development of the Saudi animation industry.

In order to achieve these aims, the study established the following Objectives. Table 26 below presents the chapters in which the Objectives were addressed.

Objectives	Chapter No.
1. To review the related theories, including business strategy theory, industry development theory and the industrial cluster theory.	Chapter Two
2. To review the literature on the development of the animation industry in order to identify the factors that influence animation industry development.	Chapter Two
3. To develop a research framework that this study will focus on, investigating within it the multiple case study countries, including the higher education institutions, networks, governments and locations.	Chapter Two
4. To investigate the Saudi Arabian animation industry using primary and secondary research	Chapter Four
5. To investigate the animation industry in the multiple case study countries, which include the Emirates as an emerging Growth industry, Egypt as an established Growth industry and the UK as a Mature industry using primary and secondary research.	Chapter Four
6. To analyse and discuss the findings from investigation the research framework factors within the multiple case study and identify how	Chapter Five

the factors of the research framework affects the evolution of the animation industry life cycle	
7. To develop a theoretical model of effective strategies for the animation industry's life cycle	Chapter Six
8. To apply the theoretical model to the Saudi Arabian case study and develop recommendations for the development of its industry	Chapter Six
9. To evaluate the Theoretical Model and the recommendations for the Saudi animation industry	Chapter six

Table 26: reference for research objectives

7.2 Research Findings

The research aims have been achieved through undertaken the research objectives. In particular, the research outcomes are: identifying barriers that constrain the life cycle of the Saudi animation industry and determine which factors have the most significant impact on each stage of the animation industry life cycle. The research outcomes will be discussed below.

7.2.1 Identifying Barriers that Constrain the Saudi Animation Industry Life Cycle

A major outcome of this thesis is that it identified the barriers constraining the life cycle of the Saudi animation industry. This has been achieved by undertaking an industry analysis of the Saudi animation industry. Based on the review of industry development theory, this thesis identified the current state of the Saudi animation industry by analysing the industry's structure and life cycle as well as the location

where the industry is clustered, its value chain and structure, its market division and key organisations within the industry. This involved semi-structured interviews, document analysis and observation. The barriers preventing the Saudi animation industry from moving from its Introductory stage to the Growth phase include the absence of skill providers, as there is only one higher education body that offers full time animation courses; the shortage of investment in animated films from private and government bodies; and the absence of distribution channels due to the weakness of media industry infrastructure. There are also high barriers to entry, due to the expensive capital and cost disadvantages faced by those entering the industry. These barriers were discussed intensively in Chapter Four and were addressed in Chapter Six, which applied the Theoretical Model to the Saudi animation industry (see section 6.2).

7.2.2 Determine Which Factors Have The Most Significant Impact On Each Stage Of The Animation Industry Life Cycle

Another major outcome of this research is that it determined which factors have the most significant impact on each stage of the animation industry life cycle and identified the strategies the multiple case study countries adopted for these factors to develop their local animation industry. This outcome has been achieved by the analysis of the investigation of the research framework factors within the multiple case study countries in combination with reviewing the industry development theory and industry cluster. This involved conducting semi-structured interviews with industry stakeholders, observations, document analysis and secondary source analysis. Since each stage of the life cycle has different features as well as common barriers, the way they are influenced by these four factors is different. Although all the

different stages required a combination of the four factors, the greater contributors among these factors differ in each stage. In the Introduction stage, higher education institutions are the most influential factor. This is because these institutions provide a skilled workforce as well as entrepreneurs, whom are both a platform for the industry. A key action that the animation industry in its Introduction stage should take to encourage its life cycle evolution is thus to improve its higher education institutions. In the Growth stage, networks and location factors have the most impact. Networks encourage knowledge diffusion and exchange, which plays an important role in improving labour skills and increasing the scale of demand for animated firms. This study thus revealed that it is beneficial for an animation industry that seeks to move from its Growth stage to the Mature stage to focus on encouraging networking among animation industry workers at the local and international levels. Another factor that should be considered at the Growth stage is the agglomeration of the location of the animation industry's value structure, which includes skills providers, animation studios, broadcasters and related agencies, to encourage knowledge diffusion. Regarding the Mature stage of the industry, the study revealed that government support plays a considerable role in sustaining the industry in its Mature stage. Government financial aid enables local firms to increase their potential and capacity, while the supportive regulations set by the government ensure they are in constant demand.

7.3 The Research's Main Contribution to Knowledge

The research outcomes that were described in the previous section have assisted the generation of a number of original contributions to knowledge. These include

developing a Theoretical Model (see Figure 28), strategic recommendations for the development of the Saudi animation industry (see section 6.2), and filling in a gap in the literature relating to the animation industry in Saudi Arabia and two other Arab countries (see Chapter 4). These contributions to knowledge will be presented below.

7.3.1 Developing the Theoretical Model

The major contribution made by this research is the development of the Theoretical Model (see figure 28). This model provides a holistic picture of the different stages of the animation industry's life cycle, as it identifies the common conditions for each stage and any barriers that have shaped these conditions (see section 6.1.1). These conditions and barriers were identified from the multiple case study countries, along with the Saudi case study (see 4.5). The model combines effective strategies for each stage of the life cycle to encourage the industry's evolution. The Theoretical Model can thus be used as a guide to understand how to encourage the evolution of the animation industry's life cycle, not only in Saudi Arabia but also in any similar situation. This Theoretical Model was evaluated by industry stakeholders from Saudi Arabia (see section 6.3). Respondents agreed generally with the strategies and the required actions for each stage. However, minor changes have been made to some of the suggested recommendations (see sections 6.3.1, 6.3.2 and 6.3.3). These changes do not affect the overall strategies and actions, so no changes to the model were required. This positive feedback demonstrates that the developed strategies are likely to be appropriate to apply. This Theoretical Model adds to earlier literature relating to the industry development as it addresses a gap that previous studies failed to cover

(see section 2.2.3), which is the investigation of the research framework factors with respect to the different life cycle stages.

7.3.2 Recommendations for the Saudi Animation Industry

Another contribution of knowledge that this research added is developing recommendations for assisting the development of the Saudi animation industry's life cycle (see section 6.2). These recommendations are based on the Theoretical Model that this study developed. However, these recommendations are specifically for the Saudi animation industry circumstances. Key industry stakeholders in Saudi animation evaluated these recommendations and provided positive feedback (see section 6.3). This demonstrates the validity of the suggested recommendations to the Saudi animation industry in particular, as many of these recommendations have already been accepted for implementation. Others have yet to be discussed in future meetings of industrial stakeholders.

7.3.3 Providing a Holistic Picture of the Saudi Animation Industry

Another original contribution to knowledge that this research provides was an overview of the Saudi animation industry (see section 4.1). This overview was a difficult issue to undertake due to the absence of academic literature on this subject. This study thus claims to have filled this gap. It identified the barriers that prevent entry to the animation market in Saudi Arabia and the barriers that prevent the Saudi animation industry from moving on from the Introduction stage to the Growth stage. It also documented the historical development of the Saudi animation industry. The

current study thus created a valuable foundation for future studies on the Saudi animation industry.

7.3.4 Adding to the Literature on Arabian Animation Industries

A further contribution of knowledge that this thesis provides is that it extended the growing body of literature on Arabian animation. This study provides an overview of the animation industry in two Arab countries as it investigated the animation industry in the Emirates (see section 4.2) and Egypt (see section 4.3), neither of which have been discussed previously from an industrial development perspective. It analysed their industry and tracked their historical development. Moreover, this study identified the strategies that these countries have used to improve their animation industry (see chapter 5).

7.3.5 Adding to the Literature on the UK Animation Industry

Another contribution of knowledge that this study generates is that it added to the available literature on the UK animation industry (see section 4.4). The current study discussed the UK animation industry from the life cycle perspective, as it provides an analysis of its industry as well as identifying issues that played a role in assisting the UK animation industry to achieve its current position as a mature industry (see chapter 5) .

7.4 Limitations of this Study

It is important to acknowledge and identify any limitations in the study because it will assist the researcher in suggesting further research. The current study has a number of limitations. Firstly, the researcher faced difficulty in gaining access to the number of interview sources initially intended, as not all the respondents who were contacted replied. In the case of the Egyptian case study, the political and social unrest at that time made visits difficult if not impossible. However, triangulation of viewpoints was maintained in each factor within the research framework.

Another potential limitation is that this study adopted a qualitative approach only. The rationale was that the researcher sought to understand how the animation industry life cycle evolves and the factors that affect its development. Quantitative analysis would be appropriate for the correlation of different factors and when measuring the impact of strategies in economic terms – and could be adopted in future studies. However, it was felt a qualitative approach was more appropriate, as it aims to understand phenomena in depth through answering what and why questions.

A further limitation is the difficulty of testing the theoretical model through actual implementation, as this would only be possible with some years of results from the recommendations developed for Saudi Arabia from the strategy in the model. However, the qualitative evaluation provided supportive feedback that demonstrates the validity of this model.

7.5 Strengths of this Study

This research studied the overall animation industry life cycle as it covered the different stages of the life cycle. Moreover, this study investigated an issue that has

not been studied before: the development of the Saudi animation industry. Besides this, it covered the animation industry of two Arab countries, where there is a scarcity in the existing literature, as well as the UK.

This study used a credible method to investigate the issue of animation industry development. It identified the different barriers that are faced at different stages of the animation industry life cycle. A multiple case study approach was used to ensure that the evidence is efficient, which makes the overall study stronger (Yin, 2013). Studying the animation industry from different countries was challenging as it required travel to many different destinations to gather data. However, the use of four different national industries, with all the details of regional clusters, industries and network structures, education and government as well as the historical development of the industry, has provided a substantive understanding of the topic. In-depth triangulation of sources was undertaken, with the viewpoints of participants from each of the different stakeholder groups involved in each of the issues considered. Triangulation of evidence source and method - observations, interviews and documentary analysis – was also conducted to reinforce the reliability of the study.

In addition, the Theoretical Model that this study developed was created by extracting realistic strategies that have been employed successfully by the multiple case study countries. Specific recommendations were developed to be used by the Saudi animation industry, and were evaluated by the key stakeholders from Saudi Arabia. The positive feedback that has been given – where recommendations were accepted and will be implemented by those contacted in Taif University, the General Commission for Audiovisual Media and the Saudi Broadcasting Corporation -

indicates that they are relevant and applicable. The Theoretical Model on which the recommendations were based is validated by the evaluation, as far as possible at this stage.

7.6 Dissemination Plans

While conducting this study, the researcher has disseminated some of the findings. The methods used to disseminate involved producing two conference papers, including:

- Alharbi, O. & Baines, E. (2015) 'Challenging Barriers to the Evolution of the Saudi Animation Industry Life-Cycle', A paper presented at the ICCI 2015 : International Conference on Creative Industry to be held in New York, USA during June, 4-5, 2015.
- Alharbi, O. & Baines, E. (2012) 'A Call for Endogenous Saudi Animation: Stop Cultural Imperialism'. A paper presented at the 6th Saudi International Conference at the Brunel University in London at October 2012.

The researcher also presented three conference posters, including:

- A poster displayed at the 8th Saudi Students Conference at Imperial College London, 31st January - 1st February 2015, titled 'Adopting an Industry Enhancement and Entrepreneurship Strategy in Saudi Higher Education to Enhance the Animation Industry'.
- A poster displayed at the 7th Saudi Student Conference at Edinburgh University in February 2014, titled 'A Strategy to Develop the Animation industry in Saudi Arabia'.

- A poster displayed at the 6th Saudi International Conference at the Brunel University in London at October 2012, titled 'Animation Industry in Saudi Arabia: the Current State and Outlook'.

Furthermore, the researcher has disseminated her findings via oral presentations during the East Midlands Universities Postgraduate Research Student Conference at the University of Derby on 6 September 2013 titled 'Animation Industry'.

In addition, the researcher is planning to disseminate the outcome of this study by publishing journal articles. As the Theoretical Model evaluation received positive feedback, the researcher is planning to present it during the Global Competitive Forum 2018, which is an annual forum held in Saudi Arabia by the Saudi Arabian General Investment Authority.

7.7 Recommendations for Future Research

The researcher plans to conduct further research in collaboration with the respondents to test the implementation of the Theoretical Model strategies. In particular, the Introduction stage strategies that will involve collaboration with the higher education institutions will be followed up. This proposed research will conduct quantitative and qualitative testing to find out how applying the suggested recommendations affected the skills and abilities of students.

The researcher also plans to conduct further research in collaboration with the Saudi General Commission for Audiovisual Media regarding the establishment of

Media City and the implementation of regulations recommended by this study. This proposed study aims to use quantitative and qualitative testing to find out whether these recommendations assisted in increasing the number of Saudi animation firms and their products. It will further examine how this could be related to increasing competition and innovation within the industry.

Future research could focus on testing, applying and adapting this Theoretical Model to the animation industry in different countries at different stages of the life cycle. Furthermore, a wider analysis of the applicability of the Model could be considered in relation to different creative industries. For example, researchers could examine adapting this Theoretical Model within different creative industries in Saudi Arabia, based on an understanding of the particular circumstances of those industries, to define the effectiveness of the model's strategies.

In addition, in the future the researcher plans to publish a book about the animation industry in the Arab world, which is a huge gap that this thesis identified in the literature review. This book will build on the research in this thesis and will extend it to cover a number of other Arab countries. It will identify their historical development and analyse the outline of their industry, to establish an understanding of the inter-relationships and networking within the region.

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Appendix

Appendix One: List of Interviewee

1. Sanna Mhumenah, the manager of Ajyal Channel, Saudi Arabia
2. Khalied Albeti, The general manager for the Saudi Television, Saudi Arabia
3. Ayman Aljebaly, the manager of SimSim Children Channel, Saudi Arabia
4. Omar Abu baker, official speaker of the Saudi Commission of Audiovisual Media, Saudi Arabia
5. Ossamah Khalifah, OK Toons studio owner and manager, Saudi Arabia
6. Khalid Aldakheel, founder of Aldakeel Animation Studio.
7. Abdulaziz Al-Muzaini, Co founder of Myrkott Animation studio, Saudi Arabia
8. Alla Mctoom, founder of Akwan Creative Studio, Saudi Arabia
9. Farah Arif, animator, animator, Saudi Arabia
10. Salem Mohammed, animator, Saudi Arabia
11. Nouf Alnaser, Bader Initiative Manager, Saudi Arabia
12. Nouf, animator, Saudi Arabia
13. Abdul-Aziz Alhargan, Manager of Bader Initiative, Saudi Arabia
14. Mullah Alamody, teaching motion graphic in Dar Al Hekma College, Saudi Arabia
15. Sarah Tashkandy, Programm leader for Islamic Art department in King Abdul-Aziz University.
16. Huda Alnbhan, teaching multimedia in Princess Nourah University, Saudi Arabia
17. Muna Alzahrani, teaching animation in Taif Universty, Saudi Arabia

18. Layla Fekhery, animation programm leader in the Higher Institution of Cinema and she teach animation course in a number of higher education institution in Egypt, Egypt.
19. Sahib, animation graduate students, Egypt
20. Jamal Shiref, Manager of Cairo Cartoon Animation Studio, Egypt
21. Amr Adel, Co founder of Al Gazera Animation Studio, Egypt
22. Hesham Abu Hegazy, co founder of Al Gazera Animation Studio, Egypt
23. Ahmed Taha Ali, Founder of ATA Animation Studio
24. Mr. Tarek Ezzat, Co founder of Ezzat Animation Studio
25. Abdualh Alamier, founder of Clear Picture Studio
26. Haidar Mohammed, co founder of Fanar Production, Emirates
27. Faddy, Co founder of Alter Ego Animation Studio, Emirates
28. Nathalie Habib, manager of Blink Animation Studio, Emirates
29. Raul, animation course programm, Emirates
30. Oliver Acke, head lecturer at Cartoon Network Academy, Emirates
31. Waffa Alaulagy, Abu Dhabi Media Zone, Emirates
32. Kulood, entrepreneur , Emirates
33. Kulah, animation student, Emirates
34. Mohamed, animation student, Emirates
35. Maryam Alshemesy, animation students, Emirates
36. Kate Corbin, programm leader of animation at Salford Universty, UK
37. Chris Webster, Senior Lecture in Animation at University of the West of England
38. Jonathan Programm leader of Animation at Middlesex University
39. Lenora student

40. Najllah, student
41. Sarah, student
42. Mark Taylor, MD of A production, UK
43. Jamie Denham, Co founder of Sliced Bread Animation, UK
44. Mario Colony, founder of Colony Media, UK
45. Steve Hanton, founder of Studio Distract, UK
46. Aaron Wood, co founder of Slurpy Studios, UK

Appendix Two: **Interview Consent Form**

Dear participant

This research has been approved, as required, by De Montfort University. This study aims to analyze the animation industry, as a part of my research to obtain the degree of Doctorate of Philosophy in Animation industry from De Montfort University. This interview will be conducted face to face, Skype or Phone. You have the right to withdraw from the interview without penalty. Your responses will be kept strictly confidential and your name will not be linked with the research material unless you give me permission to do it. Moreover, if you have any question regarding the research you have the right to ask either the researcher or her supervisor.

Contact Information:

First Supervisor name: Dr. Emily Baines ebaines@dmu.ac.uk

Faculty of Art and Design

De Montfort University, office: F2.5

Second Supervisor name: Janet Choo JChoo@dmu.ac.uk

Faculty of Art and Design

De Montfort University

Researcher name: Ohud Alharbi o.r.w.a@hotmail.com

Mobile number: 00447529743161

I confirm that I have read and understood the information above and consent to take part in this online interview:

Name of Participant

Date

Signature

I agree to have my name and job role quoted in the thesis or academic publications based on this research (tick box)

Or

I prefer my name and details to be kept anonymous in the thesis and any academic publications (tick box)

Appendix Three: Interview Question for Animation Studio

Interview Questions

General Questions

1. Can you tell me about yourself, where did you study and what has motivated you to enter the animation industry?
2. In terms of your studio, can you tell me about how it was started, about the studio space and facilities and how many employees the studio had at the time when it was established?
3. What are the animation techniques that your studio specializes in (2D, 3D or Stop motion)?
4. According to your studio production, what is the most market division that your clients request? E.g Advertisements, TV series, TV Identity, Visual effects?
5. According to market demand, which type of animation does most of clients request? E.g. 3D, 2D, stop motion?

Location and Networks

6. What is the rationale for having chosen the current location in Manchester for the studio?
7. Are there any suppliers, commissioners or distributors located close to the studio and if yes what are the advantages from being close to any of them?
8. BBC is considered as an important commissioner, do the animation studios based in Manchester have been benefit by the moving of BBC from London to Salford and if yes what is it?

9. Film festivals and Conferences related to the animation industry are very important, do you interested in attending these events and what are the advantages that your studio gets from attending it?
10. Being a member of a social network is important in terms of exchanging knowledge and developing new ideas, are there any formal or informal networks between the studio and other organizations, studios, universities, commissioners or suppliers located in the same area or in different area?
11. How often do the network members meet and do they meet in the workplace or in public places outside the workplace?
12. How effective are the networks in transferring knowledge between individuals and organizations within the animation industry?

Higher education Institution

13. Universities are considered as a creator of entrepreneurs in which it provides student with entrepreneurial skills during their study and it supports students to start up their business after they graduate, from your personal experience as a successful entrepreneur in animation, to what extent do you agree that university assists you to gained entrepreneurial skills and to establish your own business?

14. Do local universities provide you with qualified labour in range of specialized knowledge and techniques or do you think there is a shortage in particular knowledge and techniques?
15. Are there any collaborations between the studio and universities such as placement, guest lecturer and if yes what are benefits that your studio has gained from this collaboration?

Studio's employees

16. How does the studio select its employees, is it by announcement of current vacancies via your website, advertising in trade magazine or by attracting talented graduation through attending the graduation's showcase for the animation student in the University or in any industrial events such as conferences, festivals and job fairs?
17. What is the qualification that employees have? Academic (BA, MA) or self-training talent?
18. Does the studio hire freelance or you have sufficient employees?
19. Does the studio offer a training program for the new applicants?
20. How many directors, animators, scenarists and character designers does the studio have currently?

Government Factor

21. Do you receive any support from local government to encourage entering and developing the domestic animation industry? For example, funding or incubating your business such as offering space and equipment?
22. Does The Department of Culture, Media and Sport, force specific price regulations and industry standards for the animation industry?
23. From your point of view, what are the challenges that the animation industry in the UK faces?

Appendix Four: Animation Course Interview Question

- 1) Can you tell me about your self, where you studied and what motivated you to study animation?
- 2) As the course leader, can you give me an overview of the course in terms of when it started, what is the course mission and what is its competent?
- 3) In terms of skills, what are the requirements that applicants should have to enroll in this course?
- 4) In terms of the main facilities for the animation course such as computers lab with special animation software packages, how many students is the capacity of this course?
- 5) In term of course curriculums, is there collaboration with the animation industry stakeholders in designing and planning the course curriculums?
- 6) Animation industry is one of the rapidest industries in terms of development and improvement, how could the university manage to keep up-to-date its knowledge on labour market trends and employers' requirements in the animation industry?
- 7) University considers as a hub of knowledge creation and diffusion through several mechanisms such as publications, lectures and workshops, in terms of the creation and diffusion of the knowledge related to the animation industry, what is the animation course contribution?
- 8) Being a member of a social networks is important in terms of exchanging knowledge and developing new ideas, how this course encourage its members (staff and students) to join social network within the animation stakeholders?
- 9) An important mission for the university is to create qualified labour. What are the methods and approaches that are used to provide students in this course with work experience in the animation industry?

- 10) University considers as instrument to generate future entrepreneurs, how does the animation course provide students with entrepreneurs skills during their study?
- 11) What is the university contribution to assist alumni to establish their own business in the animation industry?
- 12) Finally, from your experiences what are the challenges that facing teaching animation as a disciplines in higher education?

Appendix Five : Saudi Television Managers Interviews questions

1. What are the percentages of local animation, outsource animation and imported animation in the channel?
2. What are the advantages and disadvantage of the imported animation contents? How much the imported animation cost?
3. What are the advantages and disadvantage of the outsourced animation contents? How much the imported animation cost?
4. What are the advantage and disadvantage of the local animation production? How much the imported animation cost?

Is there any plan for commission or co produce local animation studio to produce contents for the channel?

Appendix Six: Evaluation Protocol for Taif Universty;

Dear participant,

This study aims to develop a strategy to improve the animation industry in Saudi Arabia to obtain the degree of Doctorate of Philosophy from De Montfort University. The research adopts a comparative approach, as it analyses the animation industry in different countries to find out how these countries managed to develop their own animation industry. Your participation is requested in order to provide a feedback on the strategy and actions that have been developed to aid the development of the animation programm within the higher education in Saudi Arabian. If you are happy to be involved in this consultation, the researcher will contact you by phone or online voice chat to receive your feedback, when there will be opportunity for further explanation and discussion of this strategy and your views. You have the right to withdraw from the participation at any time. Your responses will be kept strictly confidential and your name will not be linked with the research material unless you give me permission to do it. Moreover, if you have any questions regarding the research you are welcome to ask.

Researcher name: Ohud Alharbi
o.r.w.a@hotmail.com
Mobile number: 00447529743161

I confirm that I have read and understood the information above and consent to take part in this telephone or online interview:

Name of Participant _____

Signature _____

Date _____

I agree to have my name and job role quoted in the thesis or academic publications based on this research (tick box)

Or

I prefer my name and details to be kept anonymous in the thesis and any academic publications (tick box)

Recruiting professionals who have an industry experience in making animation is effective in developing a high competence workforce in animation. Such professionals may not have postgraduate qualifications, but have the highest skills and updated knowledge due to their occupational experience in the animation industry. Findings from the Saudi higher education institutions demonstrate that there is an absence of teaching staff who specialize in animation, as most of them have only slight knowledge of animation, while they hold a postgraduate degree such as Master and PhD in related creative subjects such as graphic design, multimedia or digital art. Of course, this absence of specialist professional teaching staff is one of the main challenges that higher education institutions in Saudi Arabia are facing. This absence of specialist knowledge and competencies has a circular effect as these institutions continue recruiting students who have graduated from it to teach animation courses as teaching staff in spite of their basic knowledge, because in Saudi Arabia academic staff should have a degree qualification that includes Bachelor, Master and Ph.D. However, comparison with the data collected from the multiple case study countries demonstrates that their higher education institutions recruit teaching staff who have an industry background and most of them combine filmmaking and teaching at the same time. Definitely, this plays a role in providing students within these countries with core competence skills as they learn directly from industry expertise. Therefore, this strategy recommends:

- Recruiting local animation filmmakers who have long experience in animation filmmaking to hold the position of teaching staff even if they do not have a postgraduate degree as they could teach the practical aspect, while academic staffs that hold a postgraduate qualification teach the theoretical subjects.
- Recruiting regional industry professionals from Arabic countries such as from Egypt, Emirates, Syria and Jordan where they speak the same language, which makes it appropriate for Saudi students.
- Sponsor local animation filmmakers who have the industry experience to get postgraduate qualifications from more advanced institutions such as in

the UK, Canada or the US in order to meet the criteria that Saudi education ministry required as a condition for academic staff.

A. *What are your views on the above recommended (please see previous description for details)?*

B. *Do you have any further recommendations relating to these issues?*

Adopting industry engagement education such as co-projects¹⁹, inviting guest speakers from industry and internships ensures that students are equipped with the skills they need to contribute effectively as an employee within the animation industry. It enables them to apply their theoretical knowledge and practical skills in a real work environment,, adding experience that polishes students' employability skills. Moreover, it assists students to establish social networks within the industry organizations that they work with. These social networks add advantage for the student as it enables them to gain further knowledge and facilitate them finding job opportunities.

Because it seems to be difficult to apply this strategy in animation due to the issue that there are few animation firms in Saudi Arabia. Therefore, this strategy suggests:

- Establishing incubation centers within the higher education institutions to support start-up animation and creative firms that are set by graduates and further entrepreneurs. In the same time, firms within this incubation will be used to allow students to undertake co-projects and internship.
- Collaboration with government organisations to engage students with the industry. For instance, students could produce an animated instructional short film to be used to communicate announcements for these government bodies or in relation to specific events, such as the Hajj and Ramadan or health awareness.

¹⁹ : Co-project is an assignment that is submitted by a company to be developed and finished by university students, in which students will be credited for this task as they credit in normal course assignment.

A. What are your views on the above recommended (please see previous description for details)?

B. Do you have any further recommendations relating to these issues?

Using industry standard facilities to deliver the animation course, such as specialise studio and computer labs equipped with the latest hardware and software assist students to achieve competence as a future workforce. This is because it assists to extend their potential and capability to deal with the cutting edge equipment that used by the animation firms. However, the limited facilities result in providing students with basic knowledge that does not include the cutting edge knowledge. Since the knowledge and skills within the animation subject have a rapid update, using old versions of equipment could affect the students' ability to work efficiently due to their insufficient competence. This strategy suggests:

- Offering different computer labs with a large capacity of advanced hardware and software that is particularly designed for animation production and not for graphic design.
- Offering a variety of advanced animation software for 2D and 3D. This variety of software will assist to widen students' skills, as they will be familiar with the different brands of software, which will increase their potential and enable them to achieve a high level of competence.
- Offering specialist studios that support animation production, including the following: editing studio, recording studio, green screen studio and stop-motion studio. These specialist studios will enable the students to develop their animation film making skills and knowledge.

A. What are your views on the above recommended (please see previous description for details)?

B. Do you have any further recommendations relating to these issues?

Appendix Seven: Evaluation Protocol for the General Commission for Audiovisual Media

Dear participant,

This study aims to develop a strategy to improve the animation industry in Saudi Arabia to obtain the degree of Doctorate of Philosophy from De Montfort University. The research adopts a comparative approach, as it analyses the animation industry in different countries to find out how these countries managed to develop their own animation industry. Your participation is requested in order to provide a feedback on the strategy and actions that have been developed to aid the Saudi Arabian animation industry. If you are happy to be involved in this consultation, the researcher will contact you by phone or online voice chat to receive your feedback, when there will be opportunity for further explanation and discussion of this strategy and your views. You have the right to withdraw from the participation at any time. Your responses will be kept strictly confidential and your name will not be linked with the research material unless you give me permission to do it. Moreover, if you have any questions regarding the research you are welcome to ask.

Researcher name: Ohud Alharbi

o.r.w.a@hotmail.com

Mobile number: 00447529743161

I confirm that I have read and understood the information above and consent to take part in this telephone or online interview:

Name of Participant _____

Signature _____

Date _____

I agree to have my name and job role quoted in the thesis or academic publications based on this research (tick box)

Or

I prefer my name and details to be kept anonymous in the thesis and any academic publications (tick box)

Findings from the research on the Saudi animation industry showed that the absence of sponsorship for local production is one of the most difficult barriers to the industry makers. The reason of this absence of sponsorship is that the quality of the local production is less than the criteria that the Saudi television channels seek for. In the same time, animation firms cannot improve their production without sufficient budget that usually came from government and big private companies. Therefore, this study suggests:

- It recommends that the General Commission of Audiovisual Media allocation of a specific budget for producing animation with local firms. In particular, this budget would target the Ajyal Channel that is aimed at children, because most of its contents are animation. However, the Saudi Channel One and Two also display some animation content for the family. This budget should be different than that which has been given to produce TV drama, which receives a specific budget annually. The financial sponsorship will assist these television channels to commission local studios to develop high quality animation contents since they would have sufficient budget to hire a large number of qualified animators: professional scenario writers, experienced directors and famous actors to voice the animation characters. This will encourage the competitiveness between local animation studios to improve the quality of their production to meet the level that local channels request as a criteria for the animation that is displayed on their channels.

A. What are your views on the above recommendation (please see previous description for details)?

B. Do you have any further recommendations relating to these issues?

The analysis of the animation industry in developed countries showed that fostering regulation in the form of allocation of prime time to the local animation production only have encouraged their industry. This is because this regulation has encouraged local channels to buy local production. Accordingly, this provides local production firms with financial resources. Moreover, it increased competition between animation firms as each firm seeks to improve its production to attract the channel to buy it. Therefore, this study suggests:

- Fostering regulation that allocation of prime time to display the Saudi animation only to encourage the Saudi government and private TV channels to buy local animation production and sponsor local studios to produce animation instead of outsourcing from different countries. As a start, it is recommended to apply this regulation in Ramadan month. This is because in Ramadan, TV channels compete to attract commercial advertising that sponsors different programmes. Thus, the benefit from commercial advertisement will assist to cover the production budget, as in Ramadan the commercial advertisements compete to be displayed in prime time. Requiring all the Saudi channels to screen at least one locally produced animation series daily during Ramadan will allow these channels to put more budget in a local animation programme instead of importing a number of programmes.
- Then, this regulation should be extended to cover the whole of the year, as all local Saudi channels should display at least one local animation programme daily. At a later stage, when the industry is sufficiently developed, the regulation can be adjusted to a requirement that 10% of animation shown is from local production. By fostering this regulation, the Saudi animation makers will receive continuing demand, as there are 86 private channels including 5 television channels that are directed to children. This increase of the demand will provide local animation makers with continuing financial resources that will enable them to improve their capability and potential.

A. *What are your views on the proposed regulations:*

- 1. Requiring all the Saudi channels to screen at least one locally produced animation series daily during Ramadan.***
- 2. In the future, all local Saudi channels should display at least one local animation programme daily, which would be increased to be 10% local animation production.***

Appendix Eight: Evaluation Protocol for Saudi Society for Culture and Arts

Dear participant,

This study aims to develop a strategy to improve the animation industry life cycle in Saudi Arabia to obtain the degree of Doctorate of Philosophy from De Montfort

University. This research has been approved, as required, by De Montfort University. The research adopts a comparative approach, as it analyses the animation industry in different countries to find out how these countries managed to develop their own animation industry, in order to design a theoretical model for effective strategy for the animation industry. Your participation is requested in order to provide a feedback on the strategy and actions that have been developed to aid the Saudi Arabian animation industry. If you are happy to be involved in this consultation, the researcher will contact you by phone or online voice chat to receive your feedback, when there will be opportunity for further explanation and discussion of this strategy and your views. You have the right to withdraw from the participation at any time. Your responses will be kept strictly confidential and your name will not be linked with the research material unless you give me permission to do it. Moreover, if you have any questions regarding the research you are welcome to ask.

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I confirm that I have read and understood the information above and consent to take part in this telephone or online interview:

Name of Participant _____

Signature _____

Date _____

I agree to have my name and job role quoted in the thesis or academic publications based on this research (tick box)

Or

I prefer my name and details to be kept anonymous in the thesis and any academic publications (tick box)

In Saudi Arabia, there are a number of organisations under the umbrella of the Ministry of Culture concerned with creative industry. Although these

organisations arrange networking events such as galleries, symposia and workshops, there is an absence of activities that target the animation industry, as these organisations are more concerned with other forms of creative industries such as theatre, photography, sculptures, calligraphy and caricature. Therefore, the strategy suggests:

- launching a formal network that will specialise in animation only, where its members have a number of meetings around the year that allow them to discuss different issues related to the Saudi animation industry.
- These meetings would involve different activities that encourage interaction between network members such as workshops, master classes by those with industry expertise, screening the latest animated international films to discuss significant aspects such as its story and the technique that was used in it, screening members' animated experiments and projects and giving feedback. Besides that, it is recommended to live stream these meetings for the network members that are unable to attend it.
- Enable online interaction activities between network members make online networks more effective in knowledge diffusion. For example, setting a particular time weekly or monthly for live chat through the network web page to enable members who can't meet face to face to discuss any related issues to the animation industry.

A. What are your views on the above recommendation (please see previous description for details)?

B. Do you have any further recommendations relating to these issues?

There is an absence of animation industry distribution channels due to the weakness of its infrastructure in Saudi Arabia. This absence and weakness is considered as one of the barriers that prevent firms entering the Saudi animation industry. The study findings demonstrate that animation festivals encourage

networking and knowledge diffusion among new entrant participants, professionals and those just attending. Thus, the strategy suggests:

- launching annual animation festivals at the local level in different cities within Saudi Arabia, which will play the role of mediator. It recommends that these festivals target talents from different age groups with competitions, including for children as well to enhance creativity in the young generation. Besides that, animation studios also can participate in these festivals as this encourages competition among them. These animation festivals could take place within higher education institutions, as there is availability of conference facilities within most of the Saudi universities that are used to holding conferences and Graduation ceremonies.

A. What are your views on the above recommendation (please see previous description for details)?

B. Do you have any further recommendations relating to these issues?

