Challenging Barriers to the Evolution of the Saudi Animation Industry Life-Cycle

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Abstract—The animation industry is one of the creative industries that have attracted recent historiographical attention. However, there has been very limited research on Saudi Arabian and wider Arabian animation industries, while there are a large number of studies that have covered this issue for North America, Europe and East Asia. The existing studies show that developed countries such as USA, Japan and the UK have reached the Maturity stage in their animation industry life-cycle. On the other hand, developing countries that are still in the Introduction phase of the industry life-cycle face challenges to improve their industry. Saudi Arabia is one of the countries whose animation industry is still in its infancy. Thus, the aim of this paper is to address the main barriers that hinder the evolution of the industry life-cycle for Saudi animation – challenges that are also relevant to many other early stage industries in developing countries. These barriers have been analysed using the early mobility barriers defined by Porter, to provide a conceptual structure for defining recommendations to enable the transition to a strong Growth phase industry. This study utilized qualitative methods to collect data, which involved in-depth interviews, document analysis and observations. It also undertook a comparative case study approach to investigate the animation industry life-cycle, with three selected case studies that have a more developed industry than Saudi animation. Case studies include: the United Kingdom, which represents a Mature animation industry; Egypt, which represents an established Growth stage industry; and the United Arab Emirates, which is an early Growth stage industry. This study suggests adopting appropriate strategies that arise as findings from the comparative case studies, to overcome barriers and facilitate the growth of the Saudi animation industry.

Keywords—Barriers, industry life-cycle, Saudi animation.

I. INTRODUCTION

The global demand for animation content has increased substantially in recent years. The world animation consumption reached USD 62.3 billion in 2006 while in 2010 it jumped to USD 83.7 billion and its CAGR (compound annual growth rate) touched 7.7% [1]. This growth in demand may have a positive impact on the global animation production. Developed countries such as USA, Japan and the UK have a strong Mature animation industry. These developed countries have dominated the animation industry, with their productions exceeding the indigenous market demand till it reached international levels, with prominent companies such as Disney animation from USA, Aardman Animation from the UK and Nippon Animation from Japan [2]. However, a country like Saudi Arabia has an animation industry that is still in its infancy. Therefore, this study aims to address the main challenges that hinder the evolution of the industry life-cycle for Saudi animation. In particular it focuses on analysing the barriers that would affect the Saudi animation industry’s transition from the Introduction phase to the Growth phase. In the following section, the industry life-cycle concept will be highlighted to understand the industry development stages. After that, the early mobility barriers that Porter defined will be presented, to analyse the problems constraining industry development for the Saudi animation industry. This analysis is based on substantive primary research in the Saudi industry, supported by analysis of strategy from comparative case studies of the animation industry in the United Arab Emirates, Egypt and the UK. Each barrier is addressed by appropriate strategies that arise as findings from the comparative case studies and wider research. The selected case studies have been chosen to represent different stage on the industry life-cycle: the United Kingdom which represents a Mature animation industry; Egypt represents an established Growth industry; and the United Arab Emirates which is an early Growth stage industry.

II. METHODOLOGY

This study adopted a qualitative approach because qualitative study aims to explore and explain phenomena: in this study, the problems constraining industry development for Saudi animation and the challenges that face the Saudi animation industry. Due to the scarcity of the existing literature that covers the Saudi animation industry, this study utilizes the in-depth interview as the main tool to collect data [3]. Interviews have targeted individuals who hold a position within the animation industry in Saudi Arabia and the case studies. The interviewees included: animation studio managers, academics from higher education institutions, qualified skilled animators and key commissioners such as television channel managers. Some of these interviews were conducted face to face while others were via phone and email. Beside the interviews, analysing existing documents and broader media sources provided this study with further information about the animation industry in Saudi Arabia and the comparative case
III. INDUSTRY LIFE-CYCLE CONCEPT

A. Industry life-cycle phases

The industry lifecycle is like any other lifecycle phenomenon, as it passes through different phases from birth to decline. Each stage has different features and characteristics. In particular, economists have classified four phases for the industry lifecycle: Introduction, Growth, Maturity and Decline (Figure 1 industry life-cycle) [4]. The Introduction stage is also known as the Embryonic [5] or Fragmentation [6] phase. This is the first stage for the industry lifecycle, when there is limited competition because only a few firms enter the industry, at a high level of uncertainty and high level of risk, with low profits and poor product quality [4]. Although the Saudi community has been familiar with animation content such as television animated cartoons since 1965, the Saudi animation industry is still in its Introduction stage due to a number of barriers that this study aims to address. There are several indicators that show that the Introduction phase applies for the Saudi animation industry. This indicators include: a low number of market entries; the animation product has poor quality; there is uncertainty in the market and low profit due to high risk. These characteristics are due to a number of barriers that have constrained industry growth. These barriers are common in the early stages of an industry [4]. Findings from the selected case studies show that they experienced similar barriers in the past at the Introduction phase of their life-cycle.

The second stage that industry passes through is the Growth stage, when many competitors enter the industry, product quality improves and becomes reliable, demand expands, there is greater scale of production, distribution channels are established and risk can be covered as a result of the higher profits [4]. In this study, two of the selected case studies have the characteristics of the Growth stage. Egypt has an established Growth industry because it has become the dominant outsourcing hub for the animation market in the Middle East [7]. The establishment of a BPO (business process outsourcing) industry is an important driver to improve the industry lifecycle as experience and industry infrastructure is developed, leading to increasing creation of independent animation [8]. However, UAE shows a portrait of an Early Growth industry that currently has transferred from its Introduction phase to the Growth phase because the UAE government has established different organizations and associations that assisted the development of the local animation industry and attracted international investment. Consequently, it has witnessed a growing increase in the number of market entries as a result of the development of media industry infrastructure [9].

The third stage is the Maturity stage, which includes the Shakeout phase. The industry is considered at its Maturity stage when its profits reached a peak as a result of the increasing demand. [10]. Then at the middle of the Maturity phase, the Shakeout occurs due to competitive pressure, which affects the number of competitors, so only the best firms survive in this stage. However, by the end of Maturity phase, demand falls and the profits start to decline [5]-[4]. In this study, the UK has been selected as a strong Maturity industry that has a large number of market entries, which means that entering the animation market is profitable. Beside that, the animation production in the UK has a worldwide reputation for its high quality. This is because of adopting an effective strategy that focuses on improving the creative industry, which has made it the greatest contributor to the UK economy [11].

Finally, there is the Decline stage, which is the end of the industry lifecycle where the number of competitors are reduced as most of the firms exit due to a decrease in demand and decline in profits [4]. Economists believe that industries are different in terms of the period that they remain in each lifecycle phase and some industries shift directly from the Growth stage to the Decline stage without approaching Maturity [4]-[10].

Figure 1 industry life-cycle

B. The state of the Saudi animation industry

The demand for animation content in Saudi Arabia has risen as a result of the revolution of the media industry in Saudi Arabia. Several Saudi broadcasting channels were established in the 1990s, in which animation production such as advertisements, animated series and channel identity was part of the basic content of a channel [12]. There are currently six public Saudi channels and a large number of private Saudi channels. The Saudi Arabian television market has a steady annual growth of 8% CAGR between 2007-2012, as a result of its popularity as the main leisure activity in the country. The average that people in Saudi Arabia spend in watching TV is 2.7 hours daily [13]. The Saudi television program industry turnover has an annual growth of 9% CAGR between 2007-2012 [14].

In the early stages of the development of the Saudi channels, most animation content was outsourced dubbed animation. However, not all outsourced productions are appropriate to be broadcasted in Saudi channels, due to their
The Saudi animation industry started its Introduction phase when the Saudi media production companies started to commission production from different animation studios in the Arab world and Asian countries. In terms of the number of Saudi firms who are competing in the market, there are no official statistics existing that show the number of animation studios. However, from research, three studios have been identified which specialise in animated films and series, while there are a small number of creative agencies that specialise in producing animation and visual effects for advertisements. One of the animation studios is classified as a micro firm (less than ten people) while two are classified as a small and medium sized firm (with between 50 and 250 people).

The animation market in Saudi Arabia is divided into three sectors: animation contents for film and series; animation contents for advertisement; and animation contents for games. All the mentioned sectors are still in their Introduction stage. Nevertheless, the advertisement sector is more active than the other sectors. Imported animation dominates the film and television series, but there are a small number of animated films and television series that are produced by Saudi animation studios.

In terms of the number of higher education institutions that offer related courses to animation, there has been a steep increase in the number of courses that cover related skills to the animation industry: in 1999, DAH (Dar Al-Hekma University) in Jeddah was the first institution offering a full time graphic design degree that had a pathway for motion graphics. It was followed in 2001 by YU (Al Yamamah University) in Riyadh, which offered a full time graphic and multimedia degree and DAU (Dar AlUloom University), which offered a full time graphics and digital media degree in 2008. In 2009, PU (Princess Nourah bint Abdulrahman University) in Riyadh offered a full time graphic design and digital media degree with modules covering related skills to the animation industry. In 2010, an optional module of animation was added to the Islamic Art degree within KAU (King Abdul-Aziz University) in Jeddah and in the same year KFU (King Faisal University) in Alhsa added modules covering multimedia design to the Fine Art degree. Moreover, in 2013, three further universities added animation modules to their graphic and visual art courses [16]. None of these universities offered BA degrees in animation full time, due to the lack of academic professionals. Nevertheless, there has been a change in government higher education policy since 2010, with scholarships for studying animation overseas at undergraduate and postgraduate degree level now available.

IV. PROBLEMS CONSTRAINING INDUSTRY DEVELOPMENT ON THE SAUDI ANIMATION INDUSTRY

According to Porter [4], there are different mobility barriers that prevent the evolution of an emerging industry. The issue of mobility barriers has been discussed by a number of studies [17]-[18]-[10]-[14]. These barriers include: proprietary technology; access to distribution channels; access to raw materials, skilled labour and other inputs, 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. However, proprietary technology is not relevant as a barrier in the animation industry because the same animation software, such as MAYA, 3D MAX, etc. is used globally and access to the software is not problematic.

The Saudi animation industry as an emerging industry is facing problems that are constraining its development. This study applies the above barriers to analyse the problems that arose from the primary findings on the Saudi animation industry, which are addressed by suggesting recommendations of the findings from the selected case studies.

V. ANALYSING THE BARRIERS

A. Access to raw materials, skilled labour and other inputs, of appropriate cost and quality

An important industry input that Saudi animation experiences barriers to access is skilled manpower. The availability of skilled labour is the platform for the animation industry [2]. The skilled manpower term in this study includes skilled labour that specialise in any process of producing animation such as scenario writing, story boarding, character design, animation, direction and any other role that the animation industry requires. Analysis of a number of animated series that were produced by different Saudi media production companies shows that these contents have been commissioned from animation studios in Egypt, Jordan, Turkey, India and Malaysia, except one series that was produced by a local Saudi animation studio that is managed by a group of Saudi talents. This outsourcing occurs as a result of the lack of local skilled manpower.

Interviews with Saudi animation studio owners who specialize in producing animated films and series indicated that their businesses face problems in finding enough qualified candidates. Consequently, they have moved their studios to other countries such as Egypt and Turkey due to the availability of skilled labour. On the other hand, creative studios whose production is limited to short animation content and visual effects for advertisements and corporate videos manage to set up their studios in Saudi Arabia because this type of animation is relatively simple and requires few people to do it.

The above evidence suggested that the Saudi animation industry experiences a lack of one of its essential inputs, which is skilled manpower. Consequently, there is a strong suspicion that there is a shortage in the workforce suppliers. Therefore, investigations on the state of the suppliers of that input have been undertaken.

Higher education and training institutions are considered as
the main industry supplier for skilled labour [19]. In Saudi Arabia, there are no full time BA or MA courses in animation. However, a handful of universities offer BA degrees in related courses to animation such as graphic design, digital media design and multimedia design where students are introduced to graphic and CAD software to apply simple techniques. According to interviews with academic tutors from selected universities, they all agree that animation has been taught as content within creative courses rather than being taught as a full time specialised subject. Therefore, they believe that students are provided with limited basic practical skills and knowledge about animation. In these courses, students learn through practical education. According to Real World Learning, practical education “is to be able to work effectively with a particular kind of material to produce desired levels of products and performances” [20]. In particular, students only learn practical skills such as how to design a character and create simple animation scenes. The teaching strategy used in these courses in Saudi institutions does not offer internships or placements within vocational education: this is a necessary approach for preparing students to the work environment within the animation industry where they apply their skills and knowledge on a real work environment. Consequently, students graduate with basic practical skills only, which is not sufficient to work in the industry, as they need further intensified professional courses to polish their skills.

Suggestions based on findings from the selected case studies addressed this barrier by focusing on improving the skilled labour providers such as higher education and training institutions, because this will improve the outcome of these institutions which is the skilled labour. Findings indicated that animation art should be set as an independent full time course, as acquiring in-depth knowledge and skills related to animation art is time consuming. Beside that, it is important to adopt an effective teaching strategy to deliver animation courses. Findings of this study demonstrated that adopting an industry engagement teaching strategy has resulted in generating qualified skilled labour that have professional skills. For instance, in the UK, animation courses co-operate with different creative agencies to assess students by taking a live brief project, which is a real project set by a creative company that students are required to finish in a particular time and with specific criteria. Through undertaking such projects, the student experiences the real responsibility of the employee. This experience assists the student to polish their potential [24]. In the light of the above, to address the problem of the lack of skilled manpower, it is essential to improve the quality and quantity of manpower providers in Saudi Arabia, in order to create a labour pool for the Saudi animation industry.

B. Cost advantages due to experience, made more significant by the technological and competitive uncertainties.

The ‘cost advantage’ term refers to “The ability for an economic actor to produce a good or service at a lower cost” [21]. The Saudi animation industry is constrained by the cost advantage of its competitors. Thus, in Saudi Arabia most of the animation contents such as animated films and series that are broadcasted by the Saudi public and private television channels are imported from international companies such as Disney, Nippon Animation and Cartoon Network or outsourced to Arabic countries such as Egypt, Syria and Jordan.

Interviews with Saudi broadcasters indicated that the reason for this import and outsourcing is the cost advantage, because those companies and countries have more experience in the animation market, which resulted in higher quality products compared with the local one. Because of that, broadcasters would like to pay less for a local product than they pay for international and other Arabic studios. On the other hand, local studio owners argue that although they incurred a high budget in producing animation in their studio, their profits do not cover this high budget. In addition, Saudi broadcasters believe that financing is less problematic with import and outsourcing.

These evidences demonstrate that the Saudi animation industry struggles because of the barriers of cost advantage that competitors have. However, findings from the selected case studies indicated that although cost advantage is considered as a barrier, government could play a significant role in overcoming this problem. For example, in the UK, the government has introduced a tax break scheme to reduce the cost of producing animation in the UK. This regulation has had a positive impact on the local production because it adds a cost advantage for the UK animation, which has encouraged investment in the animation industry from local and international firms. Another example from wider research, of a country that has applied a significant tax break for its animation production (known as TRIP, Tax Rebate for International Production) is France. This TRIP targets international co-investment in film and animation based in France. Introducing the TRIP tax has added a competitive advantage to the French animation industry which has attracted key international studios such as Universal, the American studio behind the animated blockbuster ‘Despicable Me’, to set up in France to benefit from the tax [22].

Attracting international investment also could assist to overcome the experience issue that has constrained Saudi animation industry. Findings from the case study of UAE proved that collaboration with international investment has added an experience advantage to UAE animation. Although UAE entered the animation industry after Saudi Arabia, it evolved to its Early Growth stage while the Saudi industry was still in its Introduction stage. One of the drivers that have speeded up the evolution of the animation industry in the UAE is collaboration with international investors. For instance, Fanar Production, which is one of the pioneer Emirate animation studios, has collaborated in producing Mansour, a children’s animated series, with Cartoon Network Arabia Studio, a sister studio to the American animation studio Cartoon Network. This collaboration provided the local Emirate animation industry with experience from professionals who have a worldwide reputation for their
animation [23]. In fact, Cartoon Network Arabia Studio is a partner with TwoFour54, the media zone, in Abu Dhabi, a government initiative that aims to establish a media cluster in the region by partnership with international partners who specialise in both training and businesses such as production and marketing, related to the media industry. The international partners include: Cartoon Network Animation Academy; National Centre for Computer Animation (NCCA) at Bournemouth University; Ubisoft for the game industry; the BBC and CNN [24]. Such a media cluster has helped add substantial advantage to the UAE animation industry as a result of networking and interacting with partners that will facilitate the knowledge and skills transfer to the local animation industry. Structuring the industry in clusters is very beneficial in developing experience and diffusion of knowledge [4]. In the light of the above, this study argues that barriers due to cost advantage and experience are able to be managed.

C. Risk, which raises the effective opportunity cost of capital and thereby effective capital barriers

The animation industry is extremely risky. Entering the animation market can be prohibitively expensive, to cover industry requirements such as a high standard of equipment and professional manpower [2]. One of the major inhibitors for the animation industry in Saudi Arabia to fulfill its potential is the shortage of financial investment that Saudi animation entrepreneurs have made to improve the operational capacity for their production, such as purchasing the latest animation software and rendering engines. This shortage of financial investment resulted in poor quality of production. Studio managers refer to this shortage as due to the high level of uncertainty, arising from the absence of regulation that could provide security for people working in the animation sector, such as IP protection and a priority scheme that required broadcasters to use local production. Beside that, there is an absence of awareness of the medium: animation is neglected by producers whose focus is on live action more than animation, due to their assumption that animation is only for children. This uncertainty, and the resulting import demand, has encouraged competitors such as animation studios from Egypt to improve their operational capacity, which attracts the key Saudi commissioners.

This means that companies entering the Saudi animation market face a risk barrier that has constrained the industry life-cycle evolution.

To address the risk barriers, findings suggest that government support can assist in decreasing the financial risk. This support could be in the form of funding. For instance, the government in UAE has established DMC, Dubai Media City, which is the largest media cluster in the Middle East. DMC has incubator spaces that offer facilities for start up businesses in the creative industries, including start up businesses in animation. Findings show that a number of entrepreneurs in the animation industry favor such places to start their business, which reduces the budget cost that the animation firm requires to fulfill their potential.

Moreover, in Abu Dhabi TwoFour54, the media zone, there is an incubator known a ‘the creative lab’. This incubation facility provides start up business with everything from planning their business to activating it, including: business advice, office space, networking and access to funding. Beside that, entrepreneurs are welcome to use the facilities based in the media zone such as high standard studios and professional equipment. Moreover, this incubator assists the promotion of the new entrepreneurs through media coverage and marketing [24].

In terms of the uncertainty risk, which is another risk that the Saudi animation industry faces, wider research indicated that this barrier could be solved if the government set regulations that favor the local animation industry. For instance, in China the government has made a significant contribution to the domestic animation industry because it employed a policy that required broadcasting a specific quota of local animation production [25]. First, in 2000 the policy was that Chinese television channels should have approved to air imported animation. This policy was followed by a further one in 2004, which stated that 60% of the animation quotas must be from domestic production. However, in 2006 the policy set a new regulation favoring the domestic animation, which banned broadcasting imported animation between 5pm to 8pm. Finally, in 2009 the time of banning was extended till 9pm. As a result of this regulation, the demand on the local animation has increased, which assisted the development of the animation industry in China [25].

D. Access to distribution channels.

Distribution channel refers to “the chain of businesses or intermediaries through which a good or service passes until it reaches the end consumer” [21]. Distribution channels facilitate the process for goods or services to reach their final target. In the animation industry, there are limited distribution channels that can be used, such as personal submission for a pitch proposal to a producer or attending media fairs or competitions. Therefore, the establishment of a media infrastructure such as a media zone, an industry organisation with an official accredited website for industry stakeholders and support for distribution events is very important to manage the distribution channels. However, in Saudi Arabia the animation industry is undersupplied with appropriate infrastructure. Consequently, it still faces an up-hill struggle to achieve an established status, because there is an absence of intermediaries between key players in the animation industry such as storywriters, animation studios, producers and commissioners. Findings from the Saudi respondents indicated that there is a need for good infrastructure that facilitates networking with industry stakeholders, such as promotion events and festivals. Beside that, there is a shortage of support from animation industry organisations: there is a specialist animation industry organisation (the Saudi Society for Animation and Cartoons) and in each local area there is a
Society for Arts and Culture. However, none of these organisations take an active role in providing events or other contributions to the animation industry. These weaknesses in the infrastructure hinder the evolution of the Saudi industry life-cycle because it blocks knowledge transfer and diffusion. Beside that, it creates isolation and walls between key players in the Saudi animation industry.

On the other hand, research on the selected case studies demonstrated that both government and the private sector can overcome the barriers for access to distribution channels. In the UK, the infrastructure is very well structured. There are different events such as festivals and conferences run by a range of organisations that targeted the animation industry. Beside that, networking within the UK animation industry has great contribution to the industry due to its effectiveness in knowledge diffusion. The UK animation industry is supported by a variety of nonprofit organizations from the public and private sector, with national ones such as the British Film Institute and local ones such as Bristol Media. An example of an effective organisation that facilitates distribution in the UK animation industry is Creative Skillset [26]. This organization aims to support training and business in the creative industry by providing statistics, information, newsletters, events, workshops, training choices and careers advice. As part of this, it arranges several events and activities related to animation in the UK.

In addition, findings from the Egypt case study demonstrated the importance of appropriate infrastructure to facilitate channel distribution. The government in Egypt has established and funded organizations that focus on the animation sector. These organisations launch several events and festivals that contributed to the animation industry such as the National Center for Cinema. Besides this, there are individual efforts in establishing networks through social media that aims to create a platform to connect people within the animation industry in Egypt. Such informal networks assist knowledge diffusion and have led to the establishment of a formal organisation, the Animation Guild of Egypt, which runs workshops and animated film competitions [27]. Study findings show that such activity assists networking and interaction between industry stakeholders and greatly facilitates access to distribution channels.

VI. CONCLUSION

The animation industry in Saudi Arabia is still in its Introduction or Embryo stage of the industry life-cycle. There are some positive indications for the future such as the establishment of indigenous market demand and increase in provision of animation training in higher education. However, evidence suggests that Saudi animation faces barriers due to poor quality of production, limited experience, low availability of skilled labour, absence of infrastructure and regulatory policy, which hinder the evolution of its industry life-cycle. The selected case studies overcame these barriers by adapting successful strategies. Therefore, this study recommends adopting the selected case study strategies due to their effectiveness in removing these barriers.

It is evident from the case studies and other examples that the role of government intervention can be significant in encouraging the transition from an Introduction to a Growth stage in the industry life-cycle, by establishment of infrastructure such as a media hub for knowledge creation and diffusion; with tax breaks and regulatory support; and in the support of skilled labour providers. Individuals and industry groups have also been effective in establishing networking and distribution channels or activating existing organisations; in raising awareness of the animation industry; in developing higher education provision; and enabling productive collaborations between companies and in the engagement of education with industry.

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REFERENCES

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