

The Emergence of the Animation Industry in Bangladesh: Identification of Challenges and Prospects.

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Abstract:

Animation is becoming vital in many XR, Games and entertainment industries. However, many developed countries outsource from Asian regions because of having low labour costs. China and India are doing incredibly well outsourcing from developed countries, but Bangladesh is still lagging. This study followed the concept of Porter's Diamond model to examine the prospects and challenges of the Bangladeshi animation industry. Furthermore, this study tried to find a solution to become a sustainable animation industry in Bangladesh. In this study, data were collected from both primary and secondary sources. Forty animators participated in the survey. The primary purpose of this study is to examine the prospects and challenges of the Bangladeshi animation industry and its impact on Bangladeshi youth employment.

Key Word: *Animation, Freelancer, Outsourcing, XR*

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I. Introduction

The "Digital Bangladesh" initiative was first formulated in 2009, which boosted the ICT sectors in Bangladesh. The vision of digital Bangladesh is to push this nation to the most digital usage for public services, people involvement, human resources development, and utilizing the ICT sector in the business sector (Chowdhury, A, 2021). Since 2010 Bangladeshi ICT sectors have grown 40% annually. The main drive behind the boost is the high number of young IT entrepreneurs (Alam, R. 2020). Currently, the market in Bangladesh focuses more on IT products than ITeS (Shehab, 2019). However, a good number of freelancers earn remarkable amounts of foreign currency from outsourcing ITeS to other countries.

Animation is a significant part of ITeS, the global market share of this animation market was \$354.7 billion in 2020, and it has been predicted that this figure will reach \$642.5 billion by 2030 (Animationxpress, 2022). Most recently, North American, European, and, most importantly, the U.S.A Animation market has developed rapidly, resulting from increased demand for outsourced animation services in Asia (Niracharapa, 2014). Moreover, 27.82 per cent of the people in Bangladesh are youth, but 66% of our young graduates remain unemployed each year (Rahman, A. 2022). However, having many advantages in Bangladesh, unfortunately, we fail to grasp the significant share of this industry, whereas India and China are leading the animation outsourcing market.

Therefore, Bangladeshi youths have a massive opportunity to prepare for this significant share. Nearly 20,000 animators have been working in the Bangladeshi Animation industry; only 3,000 to 4,000 are active (Javed, H. A. 2022). Bangladesh has the advantage of a demographic dividend. This study intends to examine the sustainability of the Bangladeshi animation industry. With the proper steps and policies, Bangladesh has an enormous potential to grab this opportunity window and create the animation sector as another significant export-oriented sector. It became necessary to study further on Bangladeshi animation industry since there are not many studies on it.

1.1 The objective of this study:

This paper intends to study the following research objectives,

1. To examine the potentiality of freelancers to reduce the unemployment problem of Bangladesh.
2. To examine the impact of the local animation industry on the Bangladeshi national economy.
3. To examine the future perspective of the Bangladeshi animation industry.
4. To explore the core challenges for local animators and animation firms.

II. Literature Review

Since animation is becoming a vital part of the fourth industrial revolution, from the usages of Augmented reality, virtual reality, and movies to game development, there is no alternative to the uses of

animation. However, numerous studies have been made on this sector, few studies are about the challenges of this sector, and few have tried to explain the future perspective of this industry.

Not many scholars have explained the role of freelancers in the animation industry. Westcott (2011) In this paper, Arthur raised the importance of outsourcing the animation industry. According to his research, he explained how labor-intensive the process behind animation production is and how outsourcing can support the initiative. He even emphasized how a small animation firm can play a significant role in this industry. Bangladesh provides one of the most prominent online labourers in the world freelancing market. Islam et al. (2013) examine the local Bangladeshi animation industry: the author also raised the concern that there are insufficient institutes to prepare our youth to become part of this industry. He emphasized how Bangladesh can provide low prices for animation products. He also put the role of government more remarkably to support this infant local animation industry. Still, with the period, the pattern of this industry has evolved, and new challenges have risen and brought new opportunities.

In this evolving world, it is necessary to find the answer to why some countries have specific advantages in some industries and other countries do not have such benefits. In 1990 Michael Porter, in his book "Competitive advantage of Nations," tried to answer the national competitive advantages using the Dimond model. Simit (2014), In his paper, explained the Indian software industry with the reflection of Porter's Dimond model, compared it with the US industry, and found out that all the diamond factors in the Indian software industry are relatively weaker than the US. The primary reason was the low quality of local demand and related and supported industries. Niracharapa (2014) compared the Thai animation industries with other Asian animation industries. He followed the diamond model to examine the Thai animation industry, and they concluded that lack of skilled animators, lack of supporting industries and innovation are the critical constraints for the animation industry to sustain. Fan, K.-K.; Feng, T.-T (2021); in their paper, the authors investigated the Chinese animation industry and explained it with the help of Porter's diamond. Author reformed The Dimond model for the Chinese Animation Industry. In that model, the importance of the cultural factor has been discussed. This paper emphasized the role of culture and art as the main driving forces of any animation industry.

Chowdhury (2021) Further explained the road map of Bangladesh Vision 2041 to prepare various aspects of the fourth industrial revolution. He described how digitized our nation will be and how the nation could benefit from it. But this report didn't provide any clear concept about how our country will achieve it and the challenges to achieve this milestone. Akter et al. (2022) tried to investigate Bangladesh's major problem recently: unemployment. According to their research, 85% of labour markets belong to the informal sector, but a formal industry can provide ¼ of job seekers entering the job market each year. They find a massive skill gap between the graduates and the job market. They suggested a significant reform in our education system to create skilled labour forces for our economy. Also, they put the importance on vocational training and non-cognitive skills for our youths to eliminate the unemployment problem.

The existing literature on the Bangladeshi Animation market is minimal. Furthermore, no significant study has been done to examine the impact of our local animation industry on our national economy. So, it has become necessary to conduct further research in this area.

III. Methodology

A qualitative approach was initiated to conduct this research. Data collection was generated from secondary and primary sources through various journals, articles, and online and physical surveys. From a random sampling technique, forty animators participated in the survey. All participants are connected to a social media-based Bangladeshi Animators community and work as animators either with an animation firm or as freelancers. This study has followed the concept of Porter's Diamond model to explain the competitiveness and sustainability of the Bangladeshi Animation market, so related papers have been thoroughly reviewed and examined.

IV. Existing Global Market Scenario

The most significant share of the entertainment industry in recent years is the animation sector. In 2021 the animation sector had a 31.2 percent share of the entertainment industry. (Animationxpress, 2021) for the animation industry, the highest profit margin lies in animated feature-length films, which indicates the potential future of this industry.

In the new era of industry 4.0, XR is a vital part of it, with the advancement of VR and AR animation having already taken the lead in the market (Animationxpress, 2021). Japan and South Korea are skyrocketing in spending on digital content and game apps. The continuous demand for global animation has allowed the Asian region to emerge as a suitable place for outsourcing (Niracharapa, 2014)

Because of relatively low labour costs, Asia dominates the animation sector (Westcott, 2011). The major players in this region are India, China, Japan, South Korea, and Bangladesh. According to the Oxford

Internet Institute (OII), Bangladesh has already become the second-largest supplier of online labour (Feichin, 2004). Because of the availability of good infrastructure and strong government support, China is the strongest player in the animation outsourcing industry. The key emphasizes the online labour technical training segment South Korea also produces many studios in Asia. (Niracharapa. 2014)

A report of 2022 from Payoneer has depicted how the advancement of technology swept the freelancing market. The freelancers in the USA receive most of the benefits, but young freelancers in Asia are also sharing their name in the world fastest growing freelancing market (Mishwani, 2022)

The Highest number of Freelancers

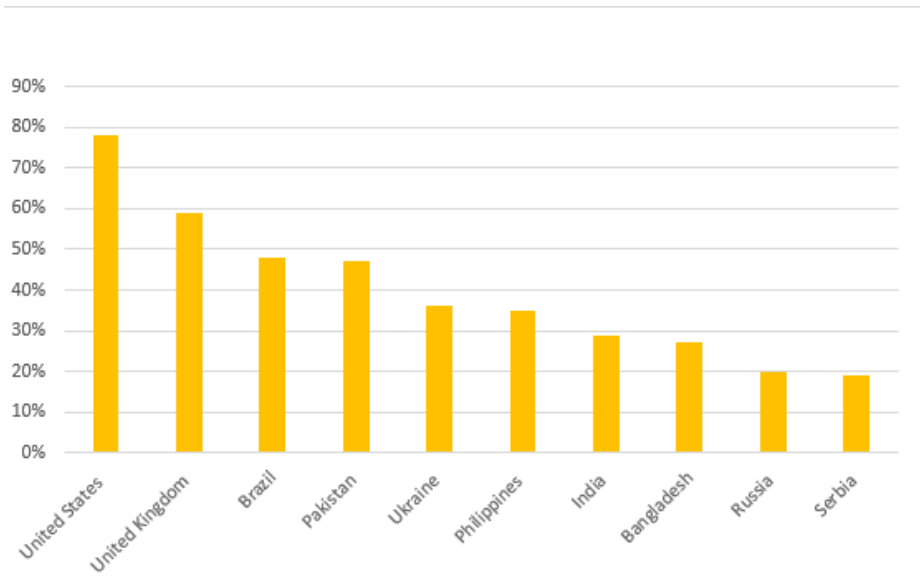


Figure 1: The Highest number of Freelancers

According to the American Gig Economy Index 2022, freelancers' earnings in the USA are rising about 78 percent yearly, which results in America's gig economy growing significantly. The United Kingdom and Brazil's gig workers' wages have also increased by about 59 percent and 48 percent, respectively. On the other hand, four Asian countries have earned the biggest cumulative gain with nearly a 138 per cent increase in their wages, Pakistan made a 47 percent growth in freelancers' revenue, and the Philippines, Bangladesh, and India have earned their position in the top 10 list.

4.1 Competitiveness in the Animation Industry

The world is changing and setting new challenges in business strategies, planning, and targeting.(Cavusgil, Ghauri, Knight, & Riesenberger, 2014). In this evolving world, it is necessary to understand the competitive advantages and disadvantages of a country or an organization. In 1990 Michael Porter, in his book "Competitive advantage of Nations," introduced the model that answers why some industries within nations are more competitive than others. According to the model, for a country to achieve national competitive advantages, four elements must be present, are 1. Factor Conditions, 2. Demand conditions. 3. Related and supporting industries, and 4. Firm strategy, structure, and rivalry. Furthermore, Government policies and chances or opportunities can influence those factors to develop an industry's competitive advantage.

But Porter's diamond model was strongly criticized because the concept works mainly based on the idea of developed nations. Such as the USA, Japan, Germany, and others, which is why it was doubted whether the same model could apply to Developing nations to explain their competitive advantages (Recklies, 2001). Kuo-Kuang Fan and Ting-Ting Feng first developed the diamond model to make it more suitable for describing the Chinese animation industry for developing countries. However, since the animation industry is defined as an industry supported by arts, science, and technology, The diamond model was a complete failure to lead China's animation industry to form a sustainable model. With the guidance of the Porter Diamond Model, the strategies for the animation industry in China to ensure sustainable development was to infuse more cultural aspects since animation industries play a vital role in the inheritance and diffuseness of the traditional culture. Even the popularity of Japanese animation mainly lies in support of their native cultures. Therefore, the animation industry has development value in three aspects: Culture, economy, and arts (Kuo-Kuang Fan and Ting-Ting Feng, 2021).

Porter's diamond model

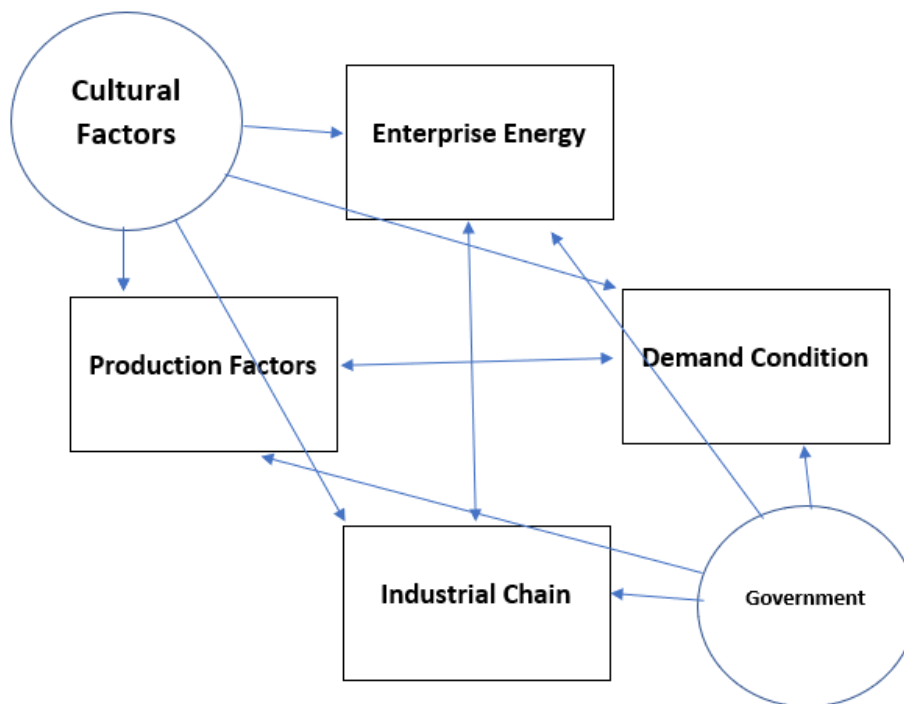


Figure 2: Porter's diamond model for the Animation Industry

In this study, the Diamond model has been adjusted according to the characteristics of the animation industry. Culture is the internal driving force for the sustainable solution for the animation industry since animation is an integral part of culture and art. Therefore, cultural factors have been added in this new Diamond model, a combination of government and chance factors. So, the development of this industry has been characterized by four environmental factors: Production factors, demand factors, Industrial chain or supporting industries, and enterprise energy. On the other hand, government and chances play a vital auxiliary role (Poter, 2012). Production factors refer to the performance of production functions for that industry, such as human, knowledge, natural, capital, and other primary production factors. Moreover, the Demand condition refers to the market demand for the products and services produced by the industry. Demand is the main driving force for any particular industry to achieve the ultimate goal of sustainable development.

The supporting industries are referred to as the industrial chain. Improving the conditions of those supporting industries can smoothen operations and lead to the ultimate goal. Enterprise strategy refers to the enterprise's organization, establishment, and management to ensure a healthy competition environment among the enterprises in the industry (Poter, 2012). Government and chances are coming from outside the industries; these two factors are discussed in the same aspect and complement each other. They have a micro auxiliary impact on the sustainable solution for this industry, such as any changes in government policies can have a macro control for the animation industry. (Poter, 2012)

In this new model, the diamond model has been adjusted with the characteristics of the animation industry. Furthermore, cultural factors have been added to this new diamond model since culture is an internal driving force for the development of the animation industry along with the government factor (Kuo-Kuang Fan & Ting-Ting Feng, 2021).

V. A Glimpse of the Local Animation Market

Almost every industry in Bangladesh is hopping on the Animation wagon. The journey started in the 1980s when the National Institute of Mass Communication offered animation training courses to train young people. This was part of a UNICEF "Meena" project as an educational tool for the masses. Although the Animation firm is still in its infancy, other firms have already seen its potential as a viable marketing tool. (Endingscene, 2019). The prospect of this industry in the local market is still limited within the realm of TVCs and OVCs (Hossain, A. 2022). Although the government has taken many initiatives to grow this industry, the more significant customers are from outside our border. There are over 4500 IT and ITEs registered companies in Bangladesh; among them, 43% are servicing both local and foreign markets, whereas 48% are exclusively

servicing the local market, and only 9% are focusing solely on foreign markets (Alam, R. 2020) According to Oxford Internet Institute (OII) in Bangladesh there is about 500,000 active freelancers are regularly working, nearly 20,000 animators are working in this industry, among them, only 3,000 to 4,000 are active (Javed, H. A. 2022) from the foreign market together with a combined total earning in about 100 million USD (Alam, R. 2020)A forecast of Bangladeshi IT markets shows that it is expected to reach 4.8 billion USD by 2025 (Shehab, M. 2019)

5.1 Challenges in the Bangladeshi Animation industry

Advancements in communication technology and improvement in internet penetration rate are the fundamental driving forces for any animation market (Animationxpress, 2021). However, Bangladesh has taken several initiatives to boost IT industries and infrastructures, such as Bangladesh authority has already set up 28 hi-tech parks, IT training institutes, and many more incubation centers across the country. Still, Bangladesh needs to emphasize a few more areas. Based on previous studies, this study has sorted out nine critical challenges for the animation industry.

Animation sector hindrance percentage.

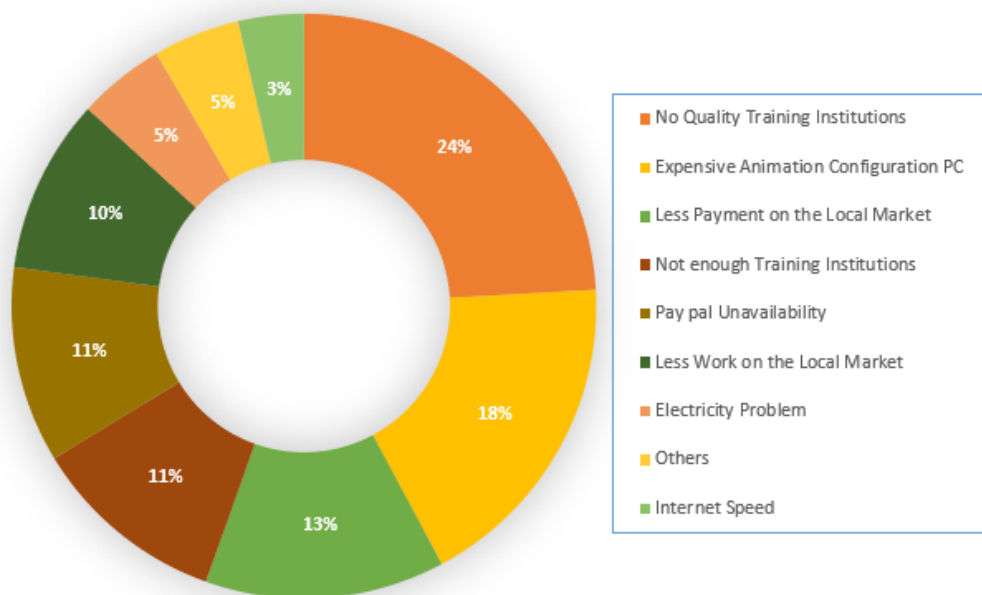


Figure 3: Animation sector hindrance percentage.

According to the survey, 24% of animators believe that not having quality training institutes is the biggest challenge for the Bangladeshi animation industry, but 11% think there are insufficient institutes. As a result, animation firms find fewer animators in the market. Although animation is a creative sector, no formal institutes include such courses in their curriculum. Dhaka University or any other university has fine arts faculty, but animation coursework is not included in the curriculum. However, animation is a vital discipline of fine arts. A few privately owned institutes allow animation courses, but those are very few, and the course fees are not affordable for students from every socio-economic class. Furthermore, the quality is also highly doubted.

Another second most crucial challenge is the expensive configuration accessories. 18% of animators believe that because of the high prices, many animators cannot afford such configuration computers. So, this problem primarily affects individual freelancers, which is a significant issue.

With 13% of the votes, the third most challenging problem is the fewer earnings from the local market. From the idea of the Dimond model, the demand factors, enterprise energy, and industrial chain are the two most critical elements in any animation industry. Because of fewer supporting industries, the local demand is lower than expected, so our animators get less work and payments from our local market.

This issue leads to our animators and animation firms often relying on outsourcing. Still, to receive payments from outside of this country, 11% of animators face another difficulty because of the unavailability of Paypal. Paypal is the most famous and widely used transaction method for freelancers. Although Xoom, a

service of Paypal, is available in Bangladesh, it does not serve all the requirements of Paypal as Xoom does not allow advanced payments. Also, Xoom takes much time to get a refund for foreign clients (Hossain, A. 2022).

In 2020 Bangladesh had a 42% smartphone adoption rate. It was predicted that the number will reach 62% in 2025, even lower than the neighboring countries, India and Pakistan (Zaman, N. T. 2022). The average mobile internet speed is 9.06Mbps, and broadband internet is 25.08 Mbps(Holy, I. J. 2020) making Bangladesh the 135th out of 137 countries for uninterrupted internet and electricity services (Business Inspection, 2021). However, these two are the main pillars of any animation industry. According to the survey, Interrupting electricity and slow internet speed hampers about 5% and 3% of our local animation sector.

5.2 Future Perspective

The Bangladeshi animation sector is promising. Experts expect the Bangladeshi animation market will dominate the global animation market because of the rising number of freelancers and the relatively low wages. In addition, because of easy access to smartphones, laptops and computers, animated content in the local market is also creating opportunities for the upward industry Javed, H. A. 2022). Previously Bangladeshi film producers used to hire Indian animators for their VFX animation in their films. Still, in recent years, local animators have been fulfilling the demand and outsourcing the same sort of work from India and the rest of the world. Therefore, a survey has been made to examine the animators' work preferences.

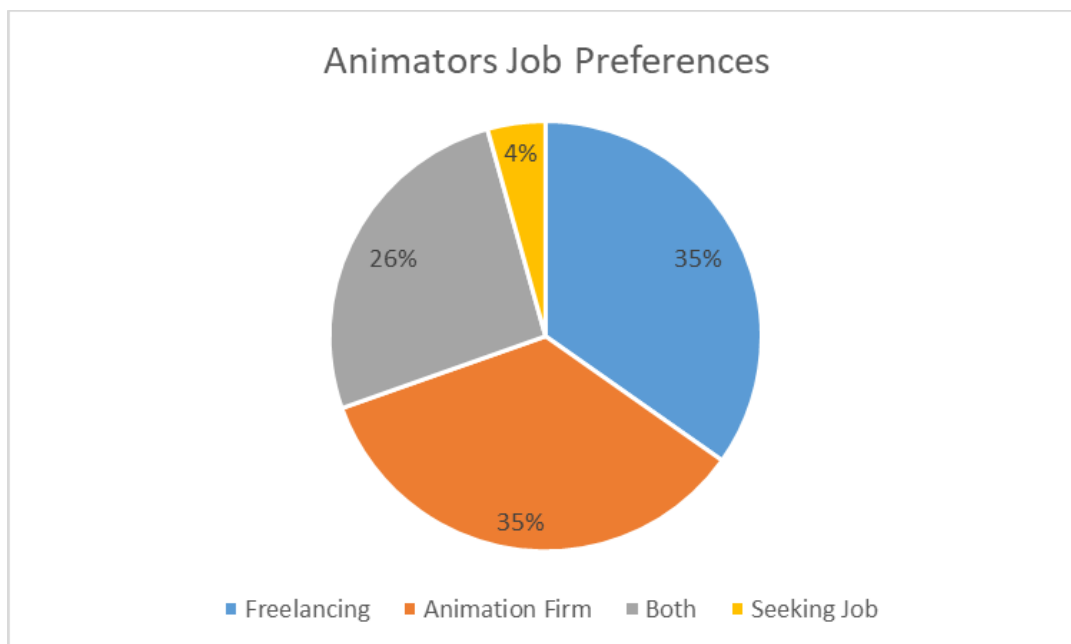


Figure 4: Animator's work preferences.

According to the chart, the same percentage, 35% of animators, are working for both animation firms and working as freelancers. Still, at the same time, 26% of them work simultaneously for any animation firm and as freelancers. The positive thing is that only about 4% of animators are without any work. However, gradually, the number of freelancers is rising, and as a result, Bangladesh has become the second largest supplier of online labour(Holy, I. J. 2020). The government has taken numerous initiatives to increase the number of freelancers rather than the quality. However, establishing IT incubation centers and software and adding 28 hi-tech parks attract foreign investment. Also, the addition of 1300 GBPS internet bandwidth through the submarine cable pushed this industry up. According to the census report of 2022, 27'82 per cent of the people in Bangladesh are youth. For these vast young future architects of Bangladesh, there are only two million job vacancies each year (Rahman, A. 2022); as a result, 66% of these young graduates remain unemployed and cannot get the opportunity to contribute to this country (Abdullah, M. 2022). We must turn these youth into a skillful labour force to benefit from this geographic dividend.

Moreover, to do that, the government is taking initiatives such as setting up technical universities, starting vocational training and many more diploma courses, which also include Animation related courses to make more freelancers. Suppose the government can nurture these youth with the proper form of quality training and promote the potentiality of the animation industry. In that case, Animation can become a crucial industry for our national economy to earn a significant amount of foreign currency.

VI. Conclusion

The Novel CoronaVirus (COVID-19) has negatively impacted the employment and livelihood of the marginal population in Bangladesh. Nevertheless, the job recovery was not immediate, so many people had to find another way to carry on their livelihood (Hossain, 2021). In the meantime, young people who adopt technology find a way to a solution by developing freelancing skills, and animation is one of those. However, this study finds that all the factors of the Dimond model corresponding to Bangladesh's animation industry are comparatively weaker than those of China and India. Nevertheless, Bangladesh is slowly making progress on it.

Youths are becoming encouraged to learn animation and change their fate by becoming self-dependent. With the rising global trend, the Bangladeshi ICT ministry has initiated a few big-budget animation films, encouraging our infant animation industry to grow. As a result, "Mujib Amar Pita", Bangladesh's first animated theatrical release in 2021, was funded by the ICT Division of the Information Ministry (Hossain, A. 2022). At the same time, parallely, XR and Gaming private firms are also rising, which are related to the animation industry and creating a vast market locally, so it is clear that we are also improving the industrial chain and enterprise energy. To fulfil the global demand, 28 Hitech parks, technical universities and more diploma institutes are under construction, which will contribute to training more skilled animators in this industry. Suppose the authority can mitigate the challenges first. Then, with the proper nurture of this infant industry, the Animation industry can become a solution to Bangladesh's unemployment problem and bring a significant amount of foreign currency to this country.

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