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Acceptance of Augmented Reality on a Worldwide Level

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Abstract

This rather creative technology, like augmented reality and virtual reality, has risen to the top of the global technology news agenda. Especially during this epidemic covid-19, people interact and connect with one another through their smartphones. When compared to virtual reality apps, augmented reality applications are far less expensive to develop. This is a wonderful opportunity to learn more about the design aspects of augmented reality and to expand your knowledge of them. In addition, this part is a sub-topic of my PhD dissertation, and it will examine the acceptability of Augmented Reality apps from the Asian area to Europe and the United States, as well as the effectiveness of these applications (US). Day by day, the number of new Malaysia-based begin in augmented reality and associated sectors is expanding exponentially. Similarly, Malaysian firms are beginning to experiment with augmented reality to advertise products.

Keywords: Acceptance, Augmented Reality and Worldwide.

Introduction

Perkins (2020), a nationwide survey performed before the coronavirus pandemic wreaked havoc on the global economy showed increasing momentum for practically every sector of immersive technology use, as well as new potential for profitability. The chief technology officer (31%), the CEO or inventor (17%), the developer or content production (14%), and another five minor sectors accounted for the majority of the respondents' experience. The vast majority of these respondents (39%) are now engaged in research and development for Google ARCore and Apple ARKit (26%). The majority of respondents (57%) believed that developing visually appealing Augmented Reality applications or incorporating Augmented Reality capabilities into existing applications is less expensive than developing good Virtual Reality apps and games.

According to Abdullah and Jamil (2021a), stated Mobile Augmented Reality (MAR) are increasing and quickly becoming a trend. The rising investment in augmented reality and virtual reality continues to expand at a rapid pace.

Statistics (2017), the amount of augmented and virtual reality (AR/VR) costs globally in 2017 was broken down into six categories, including personal or consumer services, separate manufacturing, process manufacturing (including healthcare), retail, consumer, and others.

Overall, consumer expenditure accounted for the majority of global spending in 2017, accounting for US $6.2 billion, followed by others ($3.7 billion) and process manufacturing (US $0.7 billion), which was about the same volume as individual and household services (US $0.8 billion).

ASEAN's Acceptance of Augmented Reality

According to Bezegova et al (2017), the Asian market is seeing a boom in the virtual and augmented reality sectors, particularly in China, South Korea, and Japan. The mass manufacture of augmented and virtual reality gadgets by major Asian technology companies such as Samsung, HTC, and Sony is benefiting from low-cost labour.

The Asian augmented reality and virtual reality industries have grown fast, in part because local authorities have encouraged them. Asian venture capital firms, such as Gumi, which is based in Japan, foster Asian innovation, but they are also interested in virtual reality possibilities from across the world, particularly from Europe.

Artificial intelligence (AI), augmented reality (AR), and virtual reality (VR) may be sluggish to catch on in Malaysia, but that doesn't mean they should overlook their relevance. Gaming, marketing, tourism, and other industries are gradually using augmented reality (Lazim and Abd Rahman, 2015). By allowing customers to scan the skies for the nearest airport and receive ticket discounts, Malaysia Airlines was a pioneer in utilising augmented reality in advertising campaigns in 2010.

Augmented reality in tabloid print advertisements in Malaysia is exceedingly unpopular. Because customers feel that augmented reality is too complicated and expensive for them, and because Malaysians aren't ready for it yet, industry analysts say that corporations are afraid to become involved in new media (Wafa and Hashim, 2016).

In this study by Ab Aziz et al (2012), two technological developments, like augmented reality and cloud services, are discussed within the evolution of Malaysian special education services. According to recent studies, the educational system has profited from technological progress. Students with special needs can benefit from the expansion of multimedia technologies as well. An emphasis was placed on the Malaysian government's efforts in the cloud computing market, as well as unique educational programmes.

In the suggested synergy, augmented actual fact education for kids with special needs might be provided through the use of cloud technology. Synergies between technology advancement, socioeconomic needs, and political efforts are often responsible for the discovery of future ideas in the economy. It examines how this synergy happens in Malaysia. Augmented reality and cloud computing are two areas where technology is advancing rapidly. Research on the validity of augmented reality is changing rapidly, according to this assertion made by (Saidin et al., 2015). Unfortunately, adoption of this technology, particularly in education, remains modest in Malaysia. Because of this, many researchers in the field of education should investigate the potential of augmented reality (AR) to improve educational techniques and teaching effectiveness.

In addition, Abdullah et al (2021b) now define the fundamental potential features in mobile augmented reality design principles. These discoveries will lead young AR designers or newbies, as well as instructors, in incorporating basic design principles throughout the early phases of the design process while building MAR game ideas, particularly in Malaysia.

Chinese involvement in augmented and virtual reality has also increased recently. Human resource professionals at major Chinese corporations and multinational subsidiaries in China are beginning to use augmented and virtual reality technology in their jobs. Because

of the enormous number of people who call this country home, there is a severe shortage of qualified personnel (Iresearch, 2017).

Acceptance Augmented Reality in Europe and United States of America (USA)

To simply state, Europe involves not just 28 European Union states but also nations in Eastern Europe and the Balkans, which have a long history of academic research and innovation in augmented and virtual reality and technological expertise, including the likes of Norway and Switzerland.

The European Union's (EU) economy has gained €16.5 billion as a result of this. From 2016 to 2017, Europe was the augmented reality market's dominant player. Markets for virtual reality and augmented reality are expected to grow rapidly in Europe and all around the world. Global revenues from augmented and virtual reality in Europe are expected to reach €15–34bn by 2020, supporting 225,000–480,000 people in full-time and part-time jobs, respectively. EU and state financing is available to European industry as well as academia for prototypes and start-up centres. There are several similarities between the two technologies, including hardware handling and audio software that may be used in both augmented reality and virtual reality systems. As a result, their ecosystems share many of the same scientific and economic interests.

To help people learn more about different types of heritage, Luna et al (2019) look at whether heritage-related apps may be accessed in Europe that utilise augmented reality as a guide to aid users. Because of the rise of mobile devices such as smartphones and increased Internet access, there have been significant shifts in how we find and preserve history, as well as how we share and educate about it.

Mensonen et al (2013), claim that augmented reality is included in internet browsers, such as those found on smart devices. There are several versions of wearable technology on the market, each with its own operating system and set of programmes. Apps for augmented reality features are developed by either the provider of the things given or the organiser of the area in which the smart device is operating.

Virtual reality and augmented reality have the ability to change the way we communicate and socialise with one another. In addition to impacting our daily lives, it will also create a market worth several billion euros. Both start-up and established businesses may benefit from augmented and virtual reality. European creativity, cultural diversity, and capacities may be expanded by these advances, which have the potential to affect a broad range of fields, including game creation and arts and culture, industry, education, engineering and medical. (Bezegova et al., 2017).

Conclusion

Review previous literature to see how the augmented and virtual reality markets in Malaysia, Asia, and the world as a whole actually performed in terms of acceptance. This section also looks at how this sector can grow in Malaysia, as well as how it's influenced by other industries such as handheld devices and the internet.

The augmented and virtual reality businesses are dominated by the United States of America (USA). Silicon Valley is a hub for hardware and software research and innovation, with the likes of Google, Apple, and Facebook leading the way.

Most of today's new technologies, such as augmented and virtual reality, are run by global companies, with everything from research and development activities to hardware

production to application development taking place all over the world. One can clearly see the importance of various regions, such as Europe, the US, and Asia.

Customers' purchasing habits are being influenced by new approaches such as this. Mobile phones are used to deliver services that may be taken with you anywhere you go. Sadly, little is known about how augmented reality is perceived by users and how widely the new technology is used, (Mensonen et al., 2013).

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