CHAPTER 1

INTRODUCTION

1.1   Research Background

For the last few years have seen an increased interest in studies about the creative industry. The growth of this sector is significant for the economy, and additional research is needed to fully understand this field, which is primarily based on routine work (Souza & Freitas, 2017). The application and game developers (AGD) are a part of the creative industries, which rely heavily on industry participants' information, knowledge, and creativity (Kementerian Pariwisata dan Ekonomi Kreatif, 2021). The gaming industry has grown at a breakneck pace as a result of technological advancements. Online gaming has become ubiquitous by utilizing gaming consoles, websites, social media platforms, mobile applications, and virtual reality (Sharma, Hamari, et al., 2020).
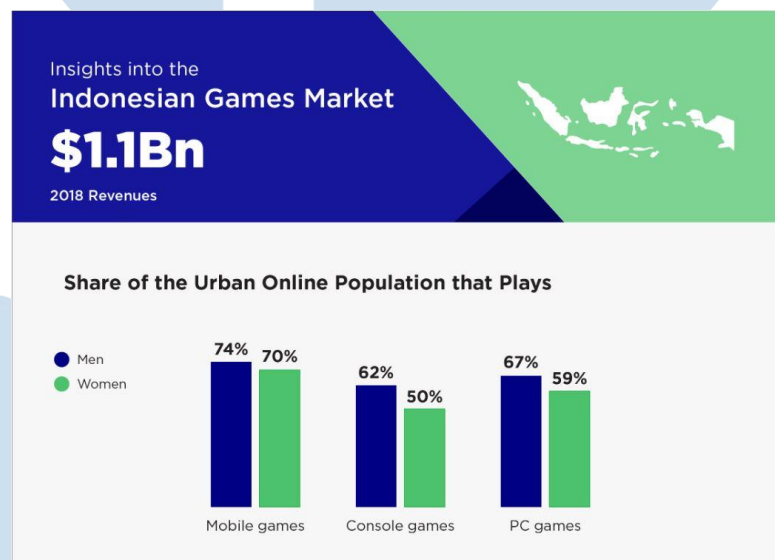

Figure 1 Insights into the Indonesian Games Market

Source: (*Insights into the Indonesian Games Market | Newzoo*, n.d.)

According to figure 1 about the Indonesian games market, the most popular game platform in Indonesia is mobile games compared to other console and personal computer (PC) games. In 2018, Indonesian gamers spent a total of one billion dollars on games, making it one of the region's largest gaming markets—the highest spending on mobile games (Newzoo,2019). According to

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the Ministry of Tourism and Creative Economy's Outlook Pariwisata dan Ekonomi Kreatif Indonesia 2021 (Kementerian Pariwisata dan Ekonomi Kreatif, 2021), AGD is one of the subsectors that contributed to Indonesia's Gross Domestic Product (GDP) of twenty-four trillion rupiah in the Creative Industry. This contribution equates to a 2% contribution to Indonesia's GDP.

As a result of AGD's contribution, Indonesia's game industry has developed into a promising one-off sector within the creative industry. With the rise of purchasing power and the mass-market adoption of accessible internet, smartphones, and PCs, digital gaming has developed into a popular pastime, particularly among urban Indonesians. According to Niko (2020) Twitter survey on 2019 of approximately four thousand Indonesians, seventy-three percent of Indonesian Twitter users play digital games, eighty-six percent of whom play from mobile devices, forty-five percent from PCs, and twenty-four percent from consoles (sixty-seven percent of them play in more than one platforms). Given this rapid and sustained growth, this may provide opportunities for local game developers to develop mobile games that can compete with known international game studio.

Table 1 Most downloaded mobile games in Indonesia in 2019

Game	Downloads	Revenue
Garena Free Fire	35,351,665	$44,167,039
Mobile Legends: Bang Bang	30,853,543	$14,021,718
PUBG Mobile	16,709,443	$11,772,438
Subway Surfer	13,364,024	$28,863
Ludo King	12,098,476	$91,286
Stack Ball	11,073,814	$3,551
Call of Duty Mobile	10,757,859	$1,832,538
TTS Pintar	9,493,687	$0
8 Ball Pool	9,354,661	$1,416,644
My Talking Tom 2	9,055,592	$25,663

Source: Niko (2020)

While the country's gaming and e-sports markets and industries have grown, some Challenges persist. Local developers' sales and growth are relatively

static. According to the government, there are 15 "large" gaming studios (in the form of limited liability corporations) and 135 small independent studios, which is quite a few for a country the size of Indonesia (Niko, 2020). However, these firms account for a minuscule portion of Indonesia's gaming business. Table 1 presents data that there is only one local game developer for the most download game in 2019, TTS Pintar. Adam Ardisasmita, CEO of local game maker Arsanesia, stated that barely 1% of the country's gaming spending goes to local developers. As a result, businesses cannot afford to develop high-cost products (Niko, 2020).

Massively multiplayer online role-playing games (MMORPGs), which involve players customising their fictionalin-game characters, interacting with other game players, and exploring never-ending immersive virtual worlds (Lee et al., 2021). Ragnarok X and Ragnarok M are two mobile games based on the popular MMORPG (massively multiplayer online role-playing game) franchise, Ragnarok Online. Both games offer players the opportunity to explore a fantasy world, complete quests, and interact with other players in real-time.

Ragnarok X: Next Generation is a mobile version of the classic PC game, Ragnarok Online. Developed by Gravity Interactive and published by Nuverse in South-East Asia, the game features a 3D open-world environment, where players can explore various locations and complete various quests. Players can choose to play as one of four classes: swordsman, mage, archer, or thief, each with their own unique skills and abilities. The game also features a player-vs-player (PVP) mode, where players can compete against each other in real-time battles(Ragnarok X: Next Generation Has Officially Launched Now ! , 2023).

Ragnarok M: Eternal Love is a mobile version of the popular PC game, Ragnarok Online. Developed by Gravity Interactive and published by X.D. Global, the game features a 2D open-world environment, where players can explore various locations and complete various quests. Players can choose to play as one of four classes: swordsman, mage, archer, or thief, each with their own unique skills and abilities. The game also features a player-vs-player (PVP) mode,

The Analysis of Mobile MMORPGs Player Behavior - Intention to Play and Pay Using Self Determination Theory, Constantin Dwi Rendragraha, Universitas Multimedia Nusantara

where players can compete against each other in real-time battles (Ragnarok Mobile Eternal Love, 2023.).

Both games feature similar gameplay, with the main difference being the graphics and art style. Ragnarok X features 3D graphics, while Ragnarok M features 2D graphics. Both games are free to play, with in-app purchases available for players who want to enhance their gameplay experience.
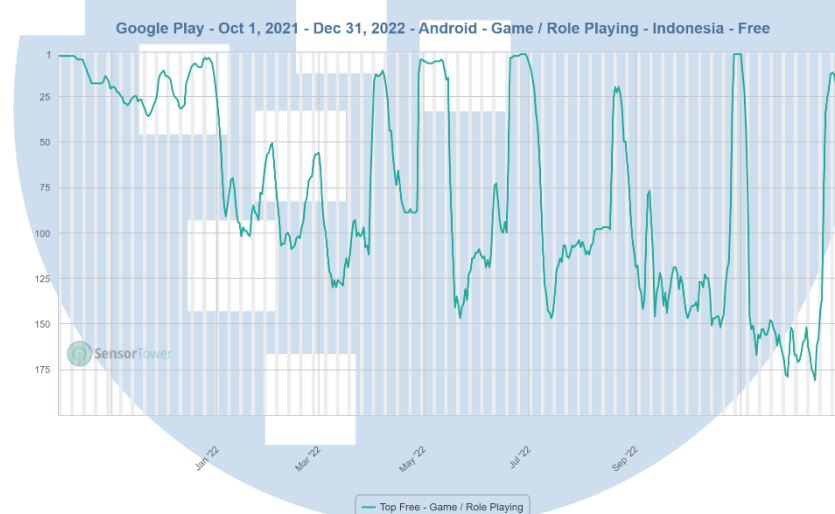

Figure 2 Ragnarok X : Next Generation Ranking on Google Play
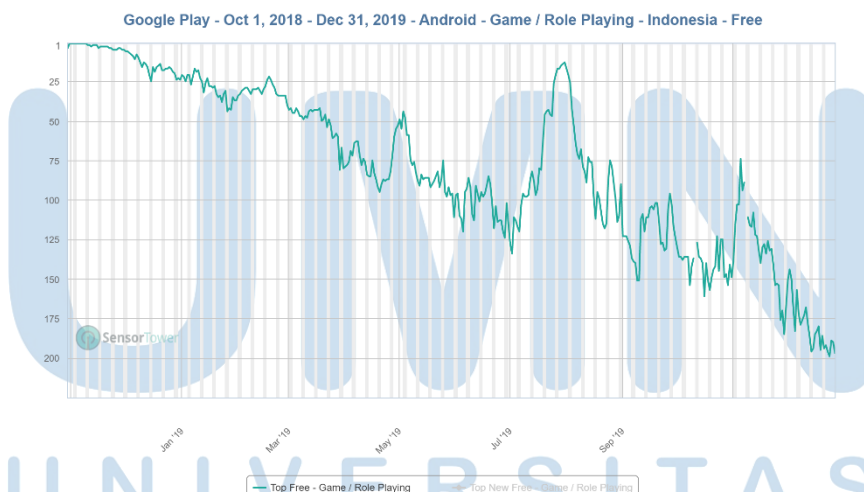*Source: Sensor Tower* (2023)

Figure 3 Ragnarok M Ranking on Google Play
Source: Sensor Tower (2023)

According to data from Sensor Tower (2023), as shown in figures 2 and 3, since its initial release, the game has consistently ranked among the top role-playing games on the Google Play store in Indonesia. This indicates a high level of enthusiasm among players for massively multiplayer online role-playing games

(MMORPGs). Additionally, the Gravity Reports Annual Report 2022 (Gravity CO., 2022) states that revenues from mobile games increased by 7.3% to KRW 320,164 million (US$ 269,365 thousand) in 2021, compared to KRW 298,324 million in 2020. This growth is largely attributed to a 296.7% increase in revenues from Ragnarok X: Next Generation, which generated KRW 126,336 million (US$ 106,291 thousand) in 2021, compared to KRW 31,844 million in 2020. This spike in revenue is attributed to the game's launch in Southeast Asia in June 2021.

Mobile games have reshaped the market, attracting a diverse range of consumers. Indonesian gamers spent a total of one billion dollars on games, making it one of the region's largest gaming markets—the highest spending on mobile games. Definetely, this make Indonesia an interesting market in the Southeast Asia as the growing countries. Thus, it is important for Indonesian businesses to understand this market, a modern and dynamic sector that not only promotes entertainment but also generates revenue, creates jobs, and fosters innovation. In this growing market of mobile online gamers, there are still need plenty of research in this study especially analysis on MMORPG player behavior in Indonesia.

One key aspect of mobile MMORPGs player behavior that has garnered significant attention is their Intention to Play and pay. This behavior is crucial because it directly impacts the financial success of mobile MMORPGs. Therefore, understanding the factors that influence a player's Intention to Play and pay is crucial for game developers and developers.

Local game developers must understand how online gamers behave to increase the frequency they visit their online gaming websites or foster player loyalty (Sharma, Tak, et al., 2020). Additionally, local game developers must grasp why individuals engage in online gaming and pay for virtual products in-game. Investigating users' experiences, preferences, sense of pleasure, and motivation enables designers to understand their consumers better, anticipate players' desires and needs, and enhance the game process, all of which result in increased financial returns Okuneva & Potapov (2014). The importance of

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research on motivations for playing and paying in a free-to-play mobile MMO game is discussed in Lucas Lopes Souza (2017), Shu-ling Wu (2018), Okuneva & Potapov (2014).

Souza & Freitas (2017) investigates eight factors that influence players' Intention to Play and pay: Time Flexibility, Arousal, Challenge, Competition, Diversion, Fun, Fantasy, and Social Interaction. Additionally, Wu (2018) asserted that players' perceived authenticity has a sizable impact on their virtual item purchase and play intention. Of course, this research focus on finding player motivation that affect the Intention to Play and Intention to Pay using Self Determination Theory (SDT) also targeted the Mobile MMORPG (Ragnarok X: Next Generation) players as the subject of this research. Using SDT can identify clearly which underlying reasons are the basis for a game to become interesting (Fabito & Cabredo, 2019).

The SDT has played a significant role in providing explanations for a variety of scientific questions. To understand how gamification impacts loyalty programs (Kim & Ahn, 2017), how game users persist in mobile gaming (Neys et al., 2014), explore Massive Open Online Courses (MOCCs) penetration in developing countries (Khan et al., 2018), and understand the antecedents of enjoyment in a video game, among other things, SDT was utilized in the research that was published (Rogers, 2017).

The thesis is divided into five sections, one of which is this introduction. The following section provides an overview of literature research on Self Determination Theory. The third section discusses the most significant methodological issues. The fourth section summarizes the research findings. Finally, the concluding section discusses the findings, including limitations and future research recommendations.

1.2   Research Problem
From some of the above descriptions that have been described, it can be formulated several research problems, namely:

(1)   Does Time Flexibility affect Intention to Play in Mobile MMORPG?

(2)   Does Arousal affect Intention to Play in Mobile MMORPG?

(3)   Does Challenge affect Intention to Play in Mobile MMORPG?

(4)   Does Competition affect Intention to Play in Mobile MMORPG?

(5)   Does Diversion affect Intention to Play in Mobile MMORPG?

(6)   Does Fun affect Intention to Play in Mobile MMORPG?

(7)   Does Fantasy affect Intention to Play in Mobile MMORPG?

(8)   Does Social Interaction affect Intention to Play in Mobile MMORPG?

(9)   Does Authenticity affect Intention to Play in Mobile MMORPG?

(10)   Does Intention to Play affect Intention to Pay in Mobile MMORPG?

1.3   Research Objective

From some of the above reseach problems that have been stated, it can be formulated several aims of this research, namely:

(1)   To know the affect of Time Flexibility on Intention to Play in Mobile MMORPG

(2)   To know the affect of Arousal on Intention to Play in Mobile MMORPG

(3)   To know the affect of Challenge on Intention to Play in Mobile MMORPG

(4)   To know the affect of Competition on Intention to Play in Mobile MMORPG

(5)   To know the affect of Diversion on Intention to Play in Mobile MMORPG

(6)   To know the affect of Fun on Intention to Play in Mobile MMORPG

(7)   To know the affect of Fantasy on Intention to Play in Mobile MMORPG

(8)   To know the affect of Social Interaction on Intention to Play in Mobile MMORPG

(9)   To know the affect of Autheticity on Intention to Play in Mobile MMORPG

(10)   To know the affect Intention to Play on Intention to Pay in Mobile MMORPG

1.4   Research Implication

This thesis has benefits that are believed to be a reference for other parties, namely:

(1)   For theoritical research is expected to be a reference in developing objects in the following research, which can develop in terms of objects or other dimensions to become more renewable and better research.

(2)   For researchers themselves, this study can provide new insights into Consumer Behavior in Mobile MMORPG by applying the Self Determination Theory as a framework for analyzing player behavior, researchers can gain a more nuanced understanding of the psychological factors at play in mobile gaming, and develop more effective strategies for studying and predicting player behavior in this rapidly growing industry.

(3)   For companies or stakeholders, it is expected that this research can be helpful for companies by understanding the psychological factors that influence a player's Intention to Play and pay in mobile MMORPGs, game developers can design more engaging and rewarding experiences that better meet the needs and motivations of their players. This could potentially lead to increased player satisfaction and loyalty, as well as higher revenue for the game.