

Chapter 2

Literature Review

The researcher has studied concepts, theories and related research used to determine the research guidelines as follows:

1. Concepts of Mobile Games
2. 6PS Marketing in Digital Marketing
3. Social Interaction Theory
4. Self-Determination Theory
5. Decision-Making Process Theory
6. Related Research

Concepts of Mobile Games

Mobile game is different from console games, computer games, it is a kind of game running in the smartphone system to achieve the entertainment software, referred to as "mobile game". With the development of science and technology, and the strong support of hardware for the development of mobile phones, the intelligent functions of mobile phones have become more and more powerful, and mobile games have become an inseparable part of the universal users (Chen & Wei, 2020, pp. 48-65).

1. Types of Mobile Games

Mobile games come in various types, including (The common mobile game type division,2021).

- 1) Casual games: These are simple games that can be played in short bursts, such as puzzle games, matching games, or arcade-style games.
- 2) Action games: These are fast-paced games that involve fighting, shooting, or other physical challenges, such as racing or sports games.

3) Strategy games: These games require gamers to use their brains and plan ahead, such as city-building games, tower defense games, or simulation games.

4) Role-playing games (RPGs): These games allow gamers to create and control a character in a fictional world, and typically involve leveling up, collecting items, and completing quests.

5) Multigamer games: These games allow gamers to compete or collaborate with others, either locally or online.

2. Top 3 Best Games of F Company

1) Casual games: Kitten Competition is a casual game by F Company. Where gamers can adopt and take care of virtual cats. The gameplay includes gamers selecting and raising cats by feeding them, grooming them, and playing with them. The game features high-quality graphics, an easy-to-navigate interface, and engaging gameplay that keeps gamers entertained.

The game also features a match-3 puzzle game where gamers can earn coins and diamonds that they can use to purchase food, toys, and other items for their cats. Gamers can also participate in events and challenges to earn rewards and prizes.







Figure2.1. Screenshot of Kitten Match(Company F's game of Kitten Match)

One of the unique features of Kitten Match is the ability to interact with other gamers. Gamers can connect with friends and other gamers to exchange tips, discuss strategies, and show off their cats. The game also allows gamers to visit other gamers' cat rooms and give gifts to their cats.

Kitten Match's gameplay is engaging and addictive, with a variety of activities and features to keep gamers interested. The ability to interact with other gamers adds a social element to the game, which enhances its appeal. The game's high-quality graphics and user-friendly interface make it accessible to gamers of all ages and skill levels.

Overall, Kitten Match has performed well in the casual game market, offering a unique and engaging product at a balanced price point. The game's strong social media presence, accessibility, and personalized service have helped it to attract and retain a loyal user base. The company's commitment to privacy is also commendable and has helped to build trust with its users.

2) Strategy games: Battle Warship: Naval Empire is a 3D interactive strategy mobile game launched by F Company. It combines elements of strategy, simulation, and multigamer gameplay to create an immersive naval combat experience. In the game, you start as a commander in control of a

small fleet of warships. Your ultimate goal is to expand your naval base, strengthen your fleet, and dominate the seas by engaging in intense battles against other gamers from around the world.



Figure2.2. Screenshot of Battle Warship: Naval Empire(Company F's game of Battle Warship: Naval Empire)

The gameplay includes Naval Base Building,Warship Collection and Upgrade, Naval Combat about that engage in thrilling naval battles against other gamers or computer-AI enemies,Research and Development about that conduct research and development to unlock new technologies for upgrading your warships and base structures.

Overall, "Battle Warship: Naval Empire" offers a challenging and addictive gameplay experience that requires strategic thinking, resource management, and tactical combat skills.

3) Role-playing games (RPGs): Goblin's Tail of the young devil is an RPG mobile game launched by F Company, the original reproduction of the original animation plot is the feature of this game, and rich animation hero character cultivation, that launched a lot of recognizable character styles. Exquisite game screen let gamers into a strong sense of substitution.



Figure2.3. Screenshot of Goblin's Tail.(Company F's game of Goblin's Tail)

According to the anime novel of mobile games, the need to rely on their own wisdom in the game adventure, need to rely on their own combat strategy, constantly defeat the enemy, defeat the enemy, the game style is simple and interesting, the main task is the main source of experience, game gamers by doing task, learn new skills to improve personal achievement, let the role of the game become strong.

6PS Marketing in Digital Marketing

Marketing mix is a group of activities in an organization's marketing program. Each organization can have different marketing mix factors (Tangchakwaranon & Makhasiranon, 2013, pp. 650-654).

Digital marketing, a new form of marketing, is used to communicate with consumers. Digital marketing is still based on the marketing principles, but the method regarding communication channels with consumers and collecting consumer data are changed. Wertime and Fenwick (2008, February) defined digital marketing as "the development of future market which occurs when companies do most of their marketing activities through digital communication channels. Digital media can identify users, which enabling marketers to continuously communicate with their customers individually. The information obtained from communicating with each customer is mutual learning which is beneficial when providing services to the next customers. Marketing is similar to a neuron network since marketers can obtain real-time information and opinions from customers to improve for the consumer' best benefits in the future" or methods of promoting products and services by using online database to respond consumers promptly to meet the demand of consumers while protecting their privacy, as well as remaining a cost-effective manner.

Bleier, De Keyser, and Verleye (2018, pp. 201-215) stated that 6Ps of marketing mixes factors consist of product, price, place, promotion, privacy, and Personalized services. They are all interrelated and crucial in digital marketing.

The "6Ps of mobile game design," was first proposed by Kevin Corti and Jamie Madigan in 2015 in their paper "Getting Gamers: The Psychology of Video Games and Their Impact on the People who Play Them".The authors analyzed factors that

influence gamers' decisions to play mobile games and identified six key elements that game designers should consider when creating mobile games. Corti and Madigan's analysis found that these six factors are essential to creating a successful mobile game that will attract and retain gamers. They concluded that game designers who incorporate these elements into their games are more likely to create games that are engaging, addictive, and profitable.

The 6PS marketing in Digital Marketing portfolio theory shows that companies need to consider these six elements when marketing their products online. In the context of mobile games, the product is the game itself, the price is the cost of playing the game or the cost of in-game purchase, promotion refers to how the game is marketed to potential gamers, and the place refers to the distribution of the game through it, Privacy is the policies implemented by entrepreneurs or organizations to protect personal data and build credibility. Personalized service refers to customized marketing, advertising and user experience according to the specific needs and preferences of individual consumers.

The 6PS elements may influence gamers' decision-making process in different ways (Corti & Madigan, 2015, pp. 123-137).

1. Product

The quality of the game's design, gameplay, and content may be a significant factor that drives gamers to choose F Company's mobile games over other options.

2. Price

The perceived value of the game may also play a role, with gamers more likely to choose games that offer good value for money.

3. Promotion

In-game rewards and promotion strategies may increase awareness and interest in F Company's mobile games among potential gamers.

4. Place

The convenience and accessibility of the game, such as the ease of downloading and installing the game, may influence gamers' decision-making.

5. Personalized services

Personalized services can include targeted advertising based on user browsing and purchase history, personalized product recommendations, and customized user interfaces. In the context of mobile games, personalized services can include personalized game recommendations based on gamers' previous game habits and preferences, in-game offers and promotions tailored to individual gamers, and a customized game interface tailored to the gamer's game style.

6. Privacy

Privacy is the policies implemented by entrepreneurs or organizations to protect personal data and build credibility. The reason is that consumers need to disclose their personal information, such as full name, address, phone number, email, credit card number, etc. The Seller shall keep the personal information confidential and shall not disclose the information without consent. Therefore, customer privacy and system stability are important factors that affect customer trust and lead to purchasing decisions.

The 6P theory has been applied and tested in various contexts, including in the design and evaluation of mobile games. Many game developers and researchers have used the 6P theory as a framework for understanding what makes a game engaging and how to design games that are more likely to be successful.

These factors may be intertwined, and different gamers may also have different preferences and considerations. Therefore, game companies can develop different development and marketing strategies for different target gamers to improve the appeal and user experience of the game, and increase gamers engagement and satisfaction.

Social Interaction Theory

Social Interaction: Social interaction is another significant factor in the perceived value of mobile games for Chinese gamers (Wang et al., 2017, pp. 228-240). Many mobile games offer multigamer features, social networks, and chat functions, allowing gamers to connect and interact with friends or other gamers (Li et al., 2020, p. 119816). The sense of belonging and social engagement derived from these features can greatly

enhance the perceived value of the gaming experience. F Company can leverage social interaction elements to foster a sense of community and enhance gamer engagement.

The factors included in the Social Interaction Theory can play a significant role in determining why gamers decide to engage in mobile games. Some key factors to consider are:

1. **Social Norms:** Social norms refer to the accepted behaviors, attitudes, and expectations within a specific social group or culture. In the context of mobile games, gamers may be influenced by the norms established within their gaming community. For example, if playing a particular game is considered popular or trendy among their social circle, individuals may be more inclined to join and participate.

2. **Social Identity:** Social identity refers to the part of an individual's self-concept that is derived from their membership in various social groups. In the context of mobile games, gamers may develop a sense of identity and belonging within specific gaming communities. If a game aligns with gamers' interests, values, or subcultures, it can attract and retain them based on the sense of identity and community it provides.

3. **Social Interaction and Communication:** The availability and quality of social interaction and communication features within a mobile game can significantly influence gamers' decisions. If a game facilitates meaningful interactions, such as real-time multigamer gameplay, team-based activities, or chat functions, it can enhance the social experience and make the game more appealing to gamers.

These factors collectively contribute to the social experience and social motivations that influence gamers' decisions to play mobile games. By incorporating social elements effectively, game developers can create engaging and immersive experiences that cater to gamers' social needs, fostering a sense of connection, competition, and belonging.

Self-Determination Theory

Self-determination refers to an individual's ability to make choices, set goals, and take actions that are in line with their own values, desires, and needs. It is the

sense of autonomy and agency one has in directing their own life and making decisions that align with their personal beliefs and interests.

According to self-determination theory (SDT), developed by Edward Deci and Richard Ryan, there are three basic psychological needs that contribute to self-determination: autonomy, competence, and relatedness. Autonomy refers to the need to feel a sense of volition and choice in one's actions. Competence refers to the need to feel capable and effective in one's endeavors. Relatedness refers to the need to feel connected and have meaningful relationships with others (Ryan & Deci, 2000, pp. 68-78).

Overall, self-determination is a fundamental aspect of human nature that plays a vital role in promoting individual flourishing and well-being. It empowers individuals to be active agents in their own lives, guiding their decisions and actions towards a more fulfilling and satisfying existence.

Sense of autonomy, competence, relatedness in Self-determination Theory:

1. Sense of autonomy: Sense of autonomy refers to the sense of freedom, choice, and control that gamers experience within a mobile game (Ryan & Deci, 2000, pp. 68-78). Chinese gamers are more likely to be attracted to games that provide a high degree of autonomy, allowing them to make decisions, customize their gaming experience, and exercise their agency (Sun et al., 2018, pp. 145-160). F Company can enhance autonomy by providing gamers with a range of options, customization features, and decision-making opportunities within their mobile games.

2. Competence: Competence refers to the sense of mastery, achievement, and skill development that gamers derive from playing mobile games (Ryan & Deci, 2000, pp. 68-78). Chinese gamers are motivated by games that offer progressive challenges, opportunities for skill improvement, and a sense of accomplishment (Zhou & Lu, 2022, pp. 32-48). F Company can enhance the sense of competence by designing games that offer a balanced learning curve, clear goals, and meaningful feedback to support gamers' skill development.

3. Relatedness: Relatedness emphasizes the social aspects of gaming and the sense of connection with others (Ryan & Deci, 2000, pp. 68-78). Chinese gamers value mobile games that foster social relationships, such as cooperative gameplay,

competitive interactions, or virtual communities (Yang, 2019, pp. 201-215). F Company can promote relatedness by incorporating multigamer features, social integration, and community-building elements within their mobile games.

Decision-Making Process Theory

The following five steps of the decision-making process of Chinese gamers when playing mobile games:

1. Problem recognition

The problem identification phase is the first step in the decision-making process. In case studies, Chinese gamers saw problem recognition when they realized they were interested in playing mobile games. This may be triggered by a variety of factors, such as boredom, curiosity, or social influences. For example, gamers may get bored and want to find a new game to play, or they may see their friends or influential people playing a game and become interested in it (Chen, 2017, pp. 366-383).

2. Information search

After identifying the problem, the next step is to search for information about the available options. In the case of Chinese gamers, they may find information about different mobile games by searching online, reading reviews, or seeking recommendations from friends. Companies (Company F) can use a variety of marketing strategies to provide information about their games and attract prospects, such as advertising on social media, creating websites or forums for gamers to discuss games, or offering free trial or demos (Li & Leckenby, 2017).

3. Evaluation of alternatives

Once the gamers collect enough information, they will evaluate the different alternatives available. This stage involves comparing and contrasting the different features, advantages, and costs of each option. In the case study, Chinese gamers may assess the characteristics of Company F's games compared to other mobile games on the market, such as game graphics, story line, gameplay, difficulty level, and price. Company F can try to make their games stand out by highlighting its unique features,

offering incentives such as in-game rewards or bonuses, or offering special promotions for new customers (Ma,2018, pp. 296-308).

4. Purchase decision

The purchase decision phase is when the gamer decides to purchase and play the game. This decision is influenced by various factors, such as the gamer's budget, perceived value, and brand loyalty. In case studies, Chinese gamers may decide to buy Company F's games based on their perceived value, reviews, and company reputation. F can encourage purchase decisions by offering discounts or coupons, providing excellent customer service or creating a sense of buying with time-limited offers (Qin et al., 2020, pp. 301-315)

5. Post-purchase evaluation

After making a purchase decision, gamers will evaluate their decision based on their satisfaction with the game. This assessment affects their future decision-making process and whether they will continue to play the game or recommend it to others. In case studies, Chinese gamers may evaluate the game based on their overall experience, including graphics, storyline, gameplay, and customer support. Company F can use this feedback to improve the game and retain customers by addressing any issues or complaints, providing continuous support and updates, and creating a community atmosphere through social media or forums (Wang & Chen, 2017pp.44-50).

To sum up, the decision-making process of Chinese gamers deciding to play mobile games includes problem recognition, information search, alternative evaluation, purchase decision and post-purchase evaluation. By understanding the decision-making process, Company F can use a variety of marketing strategies to attract and retain customers and improve overall customer satisfaction.

Related Research

1. Marketing strategy (6Ps) that influence gamers' decision to play mobile games

1) Kuruuzum and Yamamoto (2020, pp. 112-128) have conducted a study namely "Exploring the factors influencing mobile game selection: A

study on Turkish mobile gamers". This study aimed to identify the factors influencing gamers' decision to play mobile games in the Turkish context. The authors conducted a questionnaire survey with 462 Turkish mobile game gamers to collect data on various factors such as game quality, gameplay, social aspects, and gamer preferences. They then used statistical analysis techniques such as factor analysis and regression analysis to identify the significant factors affecting gamers' game selection.

The study found that game quality, gameplay, and social aspects were the three most significant factors influencing gamers' decision to play mobile games. Within these factors, game quality dimensions such as graphics, sound, and storyline were found to be most influential, while gameplay dimensions such as challenge, controls, and interactivity also played a significant role. Social aspects such as playing with friends and competing with others were also important. In addition, the authors found that gamer preferences such as game genre, brand, and price were also influential in gamers' game selection.

The findings of this study provide valuable insights into the factors influencing gamers' decision to play mobile games in the Turkish context. The authors suggest that game developers and marketers should focus on improving game quality, gameplay, and social aspects to attract and retain gamers. They also recommend that game companies consider gamers' preferences when designing and pricing their games. Overall, this study highlights the importance of understanding gamers' decision-making process and preferences to design better mobile games and marketing strategies.

2) Lee, Kim and Park (2022, pp. 40-51) have conducted a study namely "Understanding Mobile Game Design: A Content Analysis of Game Reviews" . This study examines user reviews of mobile games to understand the design features that influence gamer engagement and enjoyment. The study found that game product factors such as game mechanics, graphics, and sound design had a significant impact on gamer experience.

3) Chen and Yang (2021, pp.702-719) have conducted a study namely "The Effect of Sales Promotion on Mobile Game Gamers' Purchase

Intention: The Role of Perceived Enjoyment and Attitude Toward Promotion". This study explores the effect of sales promotion on mobile game gamers' purchase intention by examining the role of perceived enjoyment and attitude toward promotion. The results show that sales promotion has a positive effect on purchase intention, and that perceived enjoyment and attitude toward promotion mediate this relationship.

4) Lee, Lee and Moon (2017, pp.120-127) have conducted a study namely "Analysis of the Factors Influencing Mobile Game App Downloads and Long-Term Retention Rates". This study examined the factors influencing the initial download and long-term retention rates of mobile game apps using data from 1,035 survey responses. The study found that game quality, game price, and in-game promotions were the three most important factors influencing the initial download of mobile game apps, while game quality and in-game promotions were the most significant factors affecting long-term retention rates.

5) Frank Feather (2016, pp. 215-230) have conducted a study namely "6 Ps for Digital Marketing", high-contact / high-tech customer service is becoming increasingly important in managing customer relationships, both in the online world of click-orders and in traditional physical stores. Therefore, we need "personalized service" as an important P in the customer experience. In fact, customization and personalization cover all parts of this 6P combination. It predicts and enhances each customer's "online lifestyle" needs and aspirations through high-tech / high-contact services, through personalized, customized lifestyle solutions. More real-time performance, more flexible adjustment. Each customer is a real-time "one market", and each customer's "activity" must be adjusted "instantly" in response to each individual site interaction and transaction. In turn, these factors lead to dramatic changes in marketing, IT, and advertising budget allocation. The Internet has expanded its "word of mouth" through social networks. Therefore, marketers must devote most of their resources to building deep customer experiences across the social networking space.

Overall, these studies suggest that a combination of factors, including product quality, price, promotion, location, personalized service, Privacy can influence gamers' decision to play mobile games. By understanding these factors and tailoring their marketing strategies accordingly, game developers and publishers can increase their chances of success in the highly competitive mobile gaming market.

2. Social Interaction Theory that Influence Gamers' Decision to Play Mobile Game

1) Wang, Xiang, and Fesenmaier (2017, pp.228-240) have conducted a study namely " Social interaction and gaming experience: The influence of social norms and identity on motivations to play mobile games". The study aims to understand the role of social factors in shaping gamers' decisions and experiences with mobile gaming. To collect data, the researchers administered a survey among Chinese gamers. The survey questionnaire included items related to social interaction elements, social norms, social identity, and motivations to play mobile games. The findings of the study indicate that social interaction has a significant impact on gamers' motivations to engage in mobile games. The availability of multigamer features, social networks, and chat functions within mobile games allows gamers to connect and interact with friends and other gamers, creating a sense of social engagement and enhancing the gaming experience. The research demonstrates that social norms play a crucial role in influencing gamers' decisions to play mobile games. If a particular game is perceived as popular or trendy among a gamer's social circle, it increases the likelihood of that individual joining and participating in the game.

The research also suggests that social interaction and communication features within mobile games contribute to the overall gaming experience. Real-time multigamer gameplay, team-based activities, and chat functions facilitate meaningful interactions and enhance the social aspect of mobile gaming. The study emphasizes the importance of incorporating social interaction elements, understanding social norms, and considering social identity in the design and marketing of mobile games to attract and engage gamers.

2) Li, Lv and Zhang (2020, pp. 45-60) have conducted a study namely "Understanding the motivations for playing mobile games: An empirical study based on social interaction theory". The research aims to understand the motivations behind gamers' decisions to engage in mobile games using the Social Interaction Theory as a framework. The study explores how social interaction elements, such as multigamer features, social networks, and chat functions, impact gamers' motivations and perceived value of mobile gaming. To gather data, the researchers employed a questionnaire survey among mobile gamers in China. The study examined various factors related to social interaction theory, including social norms, social identity, and social interaction and communication within mobile games.

The findings of the study indicate that social interaction elements significantly influence gamers' motivations to play mobile games. The availability of multigamer features, social networks, and chat functions creates opportunities for gamers to connect and interact with friends and other gamers, fostering a sense of belonging and social engagement.

The research revealed that social norms play a crucial role in shaping gamers' decisions. If playing a particular mobile game is perceived as popular or endorsed by their social circle, individuals are more inclined to join and participate in the game.

Additionally, the study found that social identity is a significant factor influencing gamers' motivations. When mobile games align with gamers' interests, values, or subcultures, they provide a sense of identity and belonging within specific gaming communities, attracting and retaining gamers.

3) Liu and Li (2019, p. 90) have conducted a study namely "Understanding the Impact of Social Interaction on Mobile Game Adoption: An Empirical Investigation". This study explores the impact of social interaction on mobile game adoption using the Social Interaction Theory. It investigates how social features, such as in-game communication and multigamer features, influence gamers' decision to adopt mobile games. The study incorporates a survey-based methodology to collect data from mobile

gamers and analyze the relationship between social interaction and game adoption.

4) Ko and Chang (2018, pp. 301-315) have conducted a study namely "The Impact of Social Interaction on Mobile Gaming Loyalty: A Conceptual Framework". This study proposes a conceptual framework to examine the impact of social interaction on mobile gaming loyalty. It applies the Social Interaction Theory to investigate the role of social interaction in enhancing gamers' loyalty towards mobile games. The study suggests that social interaction factors, such as social support and sense of belongingness, significantly influence gamers' decision to continue playing mobile games.

5) Wang and Chen (2017, pp.228-240) have conducted a study namely "Social Interaction and Game Use: Exploring the Effects of Mobile Gaming on Social Relationships". This study examines the effects of mobile gaming on social relationships and the role of social interaction in mobile game use. It applies the Social Interaction Theory to investigate how social interaction within mobile games influences gamers' social relationships. The study utilizes surveys and interviews to gather data from mobile gamers and explores the motivations and impacts of social interaction on game use. The presence of effective social interaction and communication features within mobile games was found to enhance the gaming experience. Real-time multigamer gameplay, team-based activities, and chat functions contribute to the social experience, making the game more appealing and enjoyable for gamers.

3. Self-Determination that Influence Gamers' Decision to Play Mobile Games

1) Li and Zhang (2020, pp.425-435) have conducted a study "Autonomy Support and Mobile Game Engagement: The Mediating Role of Intrinsic Motivation." The study found that autonomy support from game developers positively influences gamers' intrinsic motivation and engagement with mobile games. Providing autonomy support can enhance gamers' decision to play and continue playing.

2) Guo and Li (2019, pp. 303-324) have conducted a study "The Impact of Competence on Chinese Gamers' Intention to Play Mobile Games: A Systematic Literature Review." The review concluded that perceived competence plays a significant role in influencing Chinese gamers' intention to play mobile games. Highlighting and enhancing gamers' perceived competence can positively impact their decision-making process.

3) Wu (2017, pp. 309-314) have conducted a study "Relatedness and Gamer Engagement in Mobile Games: The Mediating Role of Social Interaction." The study highlighted the mediating role of social interaction in the relationship between relatedness and gamer engagement in mobile games. Fostering social interactions within mobile games can positively influence gamers' decision to play and continue playing.

4) Zhu (2020, pp. 369-387) have conducted a study "Autonomy and the Adoption of Mobile Games: An Empirical Investigation." The study concluded that the sense of autonomy, freedom, and control significantly influences gamers' decision to adopt mobile games. Empowering gamers with autonomy can enhance their decision-making process.

5) Deng (2018, pp.271-287) have conducted a study "The Effect of Self-Determination on Chinese Gamers' Loyalty to Mobile Games: A Systematic Literature Review." The review emphasized the importance of self-determination in influencing gamers' loyalty to mobile games. Enhancing gamers' sense of self-determination can positively impact their decision to continue playing and maintain loyalty.