

- b) Chapter 2: Literature Review – This chapter presents a comprehensive review of relevant literature on theoretical framework, localization in mobile video games, and the relationship of user experience and behavioral intention in video games.
- c) Chapter 3: Methodology – This chapter details the research design, data collection methods, sampling and participants, data analysis techniques, and the application of theory and tools. It also explains the rationale for selecting a case study approach and describes the methods used to gather qualitative data.
- d) Chapter 4: Results – This chapter reports the findings of the study, including the localization strategies employed by Chinese mobile video game developers in the Indonesian market, the impact of localization on Indonesian high school students' gaming experiences and behavioral intention.
- e) Chapter 5: Discussion – This chapter interprets the implications of the findings and offers recommendations for Chinese mobile video game developers seeking to enhance their localization efforts for the Indonesian market. It also discusses the limitations of the study and suggests avenues for future research to further explore the role of localization in the mobile video game industry.
- f) Chapter 6: Conclusion & Suggestion– This chapter summarizes the study's main findings, their implications, and the contributions made to the existing body of knowledge. It also highlights the potential impact of the study on industry practices and future research directions in the field of video game localization.

2 Literature Review

2.1 Localization

2.1.1 The Definition of Localization

Localization is the process of adapting a product, service, or content to a specific market, language, and culture (Esselink, 2000). This adaptation ensures that the product is accessible, understandable, and appealing to the target audience. Localization is an essential aspect of globalization, as it enables businesses to tailor their products or services to cater to the specific needs and preferences of consumers in various markets. The localization process involves several aspects, including translation, adaptation of visuals, cultural adjustments, and technical modifications

In the context of the video game industry, localization plays a crucial role in making games accessible and engaging for players from diverse cultural backgrounds. The importance of localization in this industry has grown as gaming has become a global phenomenon, with players from different countries

interacting and competing in online multiplayer games. As a result, localization is not just about language but also about ensuring that game mechanics, storylines, and visuals are culturally appropriate and engaging for the target audience. The success of a localized video game can be measured by several factors, including player satisfaction, immersion, and willingness to continue playing the game. To achieve this success, developers must invest time and resources into understanding the target market's cultural norms, values, and preferences and adapting the game accordingly. This may involve working closely with localization professionals, such as translators and cultural consultants, to ensure that the final product is culturally relevant and appealing (Mangiron & O'Hagan, 2006).

2.1.2 The Importance of Localization

Localization is crucial for businesses seeking to expand into global markets. By tailoring their products or services to the specific needs and preferences of consumers in various markets, businesses can build trust and rapport with local consumers (Jimenez-Crespo, 2013). In the video game industry, localization is particularly important because players' immersion and satisfaction are key factors in determining the success of a game. A well-localized game can enhance players' enjoyment, leading to higher engagement and retention rates.

Moreover, localization can also lead to increased revenue for video game developers. By making their games accessible and engaging to a broader audience, developers can expand their market reach and boost sales. This is especially relevant in the mobile gaming industry, where the global audience continues to grow, and developers must compete for the attention of players from diverse cultural backgrounds. In addition to increased revenue, effective localization can enhance a brand's reputation, as consumers in different markets perceive the company as being culturally sensitive and committed to meeting their needs.

2.1.3 Linguistic Localization

Linguistic localization involves the translation of in-game text, dialogues, and other language-related elements, ensuring that the game's content is comprehensible and culturally appropriate for the target audience. This includes taking into account idiomatic expressions, humor, and cultural references to avoid misunderstandings and preserve the intended meaning (Mangiron & O'Hagan, 2006).

Additionally, linguistic localization must consider the different dialects, registers, and language variations within a target market. The choice of language variant can significantly impact players' perceptions of the game and their sense of immersion (Pym, 2010). Hence, it is crucial for developers to collaborate closely with professional translators and native speakers during the localization process to ensure accurate and appropriate translations. The quality of linguistic localization can directly affect players' enjoyment and satisfaction, as well as their willingness to continue playing a game. Therefore,

investing in high-quality linguistic localization can lead to higher player engagement, retention, and ultimately, increased revenue for developers.

2.1.4 Cultural Localization

In the process cultural localization, it is important to adjust mechanics, and storylines to make the game more culturally relevant and appealing to the target audience (Bernal-Merino, 2014). This process involves considering cultural norms, values, preferences, and sensitivities to avoid offense or misinterpretation (Pym, 2010). For example, certain symbols, gestures, or colors may have different meanings or connotations in various cultures, and developers should be aware of these differences to avoid unintentionally alienating players (O'Hagan & Mangiron, 2013). Furthermore, some game mechanics or storylines may not resonate with players from different cultural backgrounds, necessitating adaptations to ensure that the game remains engaging and enjoyable for the target audience.

Cultural localization can be a complex and resource-intensive process, requiring developers to invest time and effort in researching the target market and collaborating with cultural consultants and native speakers. However, the benefits of effective cultural localization are significant, as it can lead to increased player satisfaction, engagement, and retention, ultimately resulting in higher revenue for developers.

2.1.5 Technical Localization

Technical localization involves adapting a game's code, hardware, and software requirements to ensure compatibility and optimal performance in the target market (O'Hagan & Mangiron, 2013). This may include adjusting graphics, audio, and input methods, as well as addressing region-specific regulations and standards. For instance, certain countries may have different censorship laws or content restrictions, requiring developers to modify their games accordingly to comply with local regulations. Additionally, technical localization may involve adapting the game to run on different devices or operating systems prevalent in the target market, ensuring that players have a seamless and enjoyable gaming experience (Nieborg & Poell, 2018).

As with linguistic and cultural localization, the quality of technical localization can directly impact players' enjoyment, satisfaction, and willingness to continue playing a game. Therefore, developers should invest in thorough technical localization to provide an optimal gaming experience for their target audience, ultimately leading to higher player retention and increased revenue.

2.2 Localization in Mobile Video Games

2.2.1 The Definition of Localization in Video Games

Localization in video games refers to the comprehensive process of adapting a game to cater to the linguistic, cultural, and technical needs of a specific target market (Chandler, 2005). This process aims to ensure that players from diverse linguistic and cultural backgrounds can fully comprehend and enjoy the game, thereby maximizing the game's appeal and potential market reach. Localization goes beyond mere translation, encompassing the adaptation of the game's content, interface, and design elements to resonate with the target audience while maintaining the original game's intent, style, and overall experience (Esselink, 2000). Consequently, video game localization is a critical aspect of the game development process, enabling developers and publishers to reach a broader audience and tap into new markets globally.

The importance of localization in video games has increased significantly in recent years, as the gaming industry has become more globalized and interconnected (O'Hagan & Mangiron, 2013). With the advent of digital distribution platforms and the internet, video games can now be accessed by players from virtually any part of the world. This has made localization an essential component of the game development process, as it allows game developers to tailor their products to meet the unique linguistic, cultural, and technical requirements of different markets, ensuring their games can be enjoyed by a diverse audience. The rapid growth of the gaming industry has led to an increasing demand for localization services, with many developers and publishers recognizing the value of creating localized versions of their games to expand their market reach and enhance player satisfaction.

2.2.2 Classification of localization in video games

Video game localization can be classified into several categories based on the extent and nature of the changes made to the original game. These categories include linguistic localization, cultural localization, and technical localization (Mangiron & O'Hagan, 2006). Linguistic localization primarily focuses on translating in-game text, dialogues, and audio content, while also addressing the nuances of the target language, such as idiomatic expressions, slang, and humor. This process may involve re-recording voiceovers, adjusting the game's script, and modifying in-game text to ensure that the translation is accurate, clear, and engaging for the target audience (Chandler, 2005). Linguistic localization requires a deep understanding of both the source and target languages, as well as the cultural context in which the game will be played, to ensure that the localized content remains true to the original intent while resonating with the target audience.

Cultural localization involves adapting the game's content to reflect the cultural values, norms, and preferences of the target market, which can include altering characters, storylines, or visual elements to

avoid potential cultural insensitivity or misinterpretation (O'Hagan & Mangiron, 2013). This process may involve changing the appearance of characters, modifying the game's story to suit local tastes, or even redesigning levels and environments to align with the target market's cultural expectations. Cultural localization is a delicate process that requires a deep understanding of the target culture, as well as a careful balancing act between preserving the original game's essence and making it accessible and appealing to the target audience.

Technical localization, on the other hand, pertains to adjusting the game's software, hardware, and platform compatibility requirements to meet the technical standards of the target market (Chandler, 2005). This process may involve modifying the game's code to ensure compatibility with local hardware, adjusting the game's performance to accommodate different software standards, or even creating entirely new versions of the game to suit specific platforms or devices. Technical localization requires close collaboration between translators, programmers, and other technical experts to ensure that the localized game runs smoothly and efficiently on the target market's systems.

2.2.3 The Influencing Factors of Localization in Video Games

There are several factors that can influence the success of video game localization. These factors include the quality of the translation, the cultural relevance of the game's content, the appropriateness of the game's design elements, and the technical compatibility of the game with the target market's hardware and software. A high-quality translation is essential for ensuring that the localized game effectively conveys the intended meaning and experience to the target audience. This involves not only the accuracy and clarity of the translation but also the adaptation of idiomatic expressions, humor, and other language-specific nuances that may not have a direct equivalent in the target language (Chandler, 2005).

The cultural relevance of the game's content is another critical factor that can influence the success of localization efforts. A game that is culturally insensitive or inappropriate for the target market may face backlash from players or even be banned or restricted by local authorities. To avoid such issues, developers and publishers should carefully consider the target market's cultural norms and values when localizing their games and be prepared to make necessary adjustments to ensure that the game is well-received by the target audience (Pujol, 2010).

Appropriateness of the game's design elements, such as the user interface, graphics, and audio, also plays a crucial role in the success of localization efforts (O'Hagan & Mangiron, 2013). Design elements that are difficult to understand or navigate for the target audience can create a barrier to entry, leading to a less enjoyable gaming experience and a potential decrease in player retention. Therefore, adapting these

elements to suit the preferences and expectations of the target market is essential for ensuring that the localized game is both accessible and engaging for the target audience.

2.3 Technology Acceptance Model (TAM)

2.3.1 The Development of TAM

Fred Davis first proposed the Technology Acceptance Model (TAM) in 1986, building upon Fishbein and Ajzen's Theory of Reasoned Action (TRA) from 1975, but focusing more on the adoption of information systems (Davis, 1989). The goal of the TAM is to identify and forecast what drives the adoption of technology in different settings, primarily aiming to elucidate the elements that affect an individual's decision to use a technology. The theory suggests that two key components, the perceived benefit and the perceived simplicity of use, guide a user's inclination to use a technology.

Perceived usefulness is defined as the extent to which an individual thinks that using a certain system would bolster their work efficiency, while perceived ease of use is the extent to which an individual thinks that using a certain system would require little to no effort. As time passed, the TAM underwent a series of refinements and improvements, leading to the creation of advanced versions like TAM2 and TAM3. These versions incorporate additional variables and connections to improve the prediction of technology adoption by users.

Despite its numerous adaptations, the core constructs of perceived usefulness and perceived ease of use have remained consistent, and the model has been widely applied and validated in various technology adoption studies. TAM's strength lies in its parsimony and its ability to explain a significant proportion of the variance in users' intentions to adopt technology (Legris, Ingham, & Collette, 2003). As a result, TAM has become one of the most influential and well-established models for predicting and understanding users' acceptance and use of technology. The continued popularity and relevance of TAM in contemporary research can be attributed to its robustness and adaptability to different contexts and technologies. Researchers have been able to apply TAM to a wide range of technological applications, including e-commerce, e-learning, mobile applications, and video games. This widespread applicability has led to the development of more domain-specific versions of TAM and has contributed to the ongoing refinement and enhancement of the model.

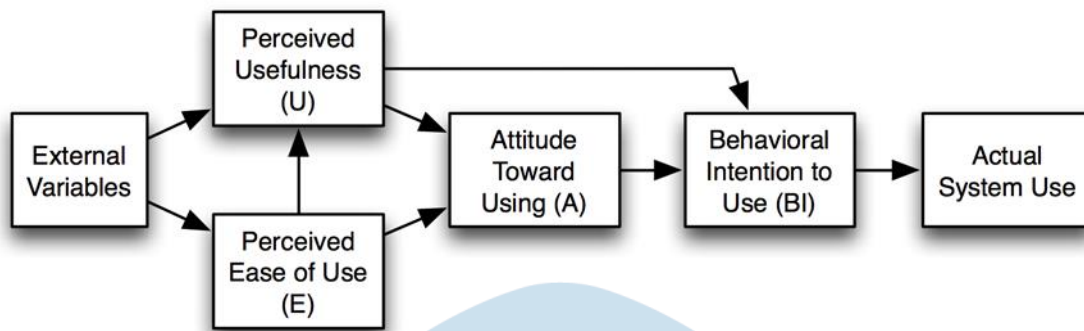


Figure 2.1 Illustration of TAM Model

2.3.2 Application of TAM

One of the primary applications of TAM has been in the field of information systems, where it has been used to study user acceptance of various technologies such as computer software, hardware, and information systems (Venkatesh, Morris, Davis, & Davis, 2003). The model has proven to be particularly useful in identifying the factors that drive user acceptance, thereby enabling organizations to better understand the dynamics of technology adoption and develop strategies to facilitate smoother technology transitions.

In the context of e-commerce, TAM has been employed to investigate user acceptance of online shopping platforms, digital payment systems, and other related technologies (Gefen, Karahanna, & Straub, 2003). Researchers have examined how perceived usefulness and perceived ease of use, as well as other factors such as trust and perceived risk, impact consumers' intentions to use e-commerce technologies, leading to valuable insights for both practitioners and academics.

In the realm of e-learning, TAM has been used to explore factors affecting the adoption of learning management systems, online learning platforms, and other educational technologies (Teo, 2009). By understanding the factors that influence students' and educators' intentions to use e-learning technologies, researchers and practitioners can develop more effective strategies to promote technology integration and enhance the overall learning experience.

TAM has also been applied in the context of mobile applications and video games, where researchers have examined the factors that influence users' intentions to adopt and continue using mobile apps and gaming (Wu & Wang, 2005). In the gaming industry, understanding user acceptance of new technologies is crucial, as it helps developers and publishers to design and market games that cater to the preferences and needs of their target audience. By incorporating TAM into their research, scholars have been able to

identify key factors that influence users' intentions to play and continue playing video games, such as game design, social interactions, and the gaming environment.

2.4 User Experience and Behavioral Intention in Video Games

2.4.1 User Experience in Video Games

User experience (UX) in video games refers to the overall experience that players have while interacting with a game, encompassing aspects such as enjoyment, satisfaction, immersion, and usability (Law et al., 2009). A positive UX is essential for the success of a video game, as it can enhance player engagement, retention, and word-of-mouth promotion (Desurvire et al., 2004). Game developers and researchers have increasingly focused on understanding and evaluating UX in order to optimize game design and meet the diverse needs and preferences of players. The concept of UX in video games is grounded in broader theories and models from human-computer interaction (HCI) and psychology, which emphasize the importance of understanding the interplay between users, technology, and context in shaping experiences (Law et al., 2009). In the gaming context, UX research seeks to identify the factors that contribute to enjoyable and engaging experiences for players, as well as the methods and techniques that can be employed to evaluate and improve these experiences.

Assessing UX in video games is a complex and multifaceted process, as it requires consideration of both objective and subjective aspects of the gaming experience (Calvillo-Gómez et al., 2010). Objective aspects include factors such as game mechanics, interface design, and performance, while subjective aspects encompass players' perceptions, emotions, and preferences. Researchers and practitioners have developed various methods and tools to evaluate UX in games, including heuristic evaluation, questionnaires, interviews, and observation. Understanding UX in video games is crucial not only for game developers but also for researchers, educators, and policymakers interested in leveraging the potential of games for various purposes, such as learning, health, and social change. By identifying the factors that contribute to positive UX and developing strategies to enhance these experiences, stakeholders can harness the power of games to engage and motivate diverse audiences and achieve desired outcomes (Desurvire et al., 2004).

2.4.2 Elements of User Experience in Video Games

The user experience in video games comprises various elements that can be broadly categorized into pragmatic, hedonic, and sociability dimensions (Hassenzahl, 2008). Pragmatic elements include aspects related to usability and functionality, such as game mechanics, controls, interface design, and feedback. These elements are essential for ensuring that players can effectively interact with the game and achieve their goals. Hedonic elements encompass the emotional and experiential aspects of the gaming

experience, such as enjoyment, immersion, and aesthetics. Enjoyment, which refers to the pleasure and satisfaction derived from playing a game, is a key determinant of player engagement and retention (Vorderer et al., 2003). Immersion, or the degree to which players become absorbed in the game world, can also contribute to the overall enjoyment and appeal of a game.

Sociability elements involve the social dimensions of the gaming experience, including communication, collaboration, and competition, which facilitate interaction and connection between players. Social interaction in video games can enhance players' sense of belonging and community and provide additional motivation to continue playing the game. Furthermore, the social aspects of gaming have become increasingly prominent with the rise of online and multiplayer games, which offer a variety of social experiences, ranging from cooperative play to competitive esports (Nieborg & Poell, 2018). The elements of user experience in video games include pragmatic, hedonic, and sociability dimensions, which collectively contribute to the overall quality of the gaming experience. By understanding and addressing these elements, game developers can create engaging and enjoyable games that cater to the diverse needs and preferences of players, ultimately promoting player satisfaction, engagement, and retention (Desurvire et al., 2004).

2.4.3 Behavioral Intention in Video Games

Behavioral intention in the context of video games refers to players' intentions to engage in specific behaviors related to the game, such as continued play, recommending the game to others, or making in-game purchases (Ajzen, 1991). Behavioral intention is an important construct in understanding player engagement and retention, as it can provide insights into the factors that influence players' decisions to continue playing or disengage from a game.

Behavioral intention in video games can be influenced by various factors, including individual characteristics, such as motivation, attitudes, and preferences, as well as game-related factors, such as design, mechanics, and narrative (Davis et al, 1992). For example, players who are intrinsically motivated to play a game for the enjoyment and challenge it provides may exhibit higher intentions to continue playing than those who are extrinsically motivated by rewards or external pressures (Yee, 2006). Furthermore, the relationship between game-related factors and behavioral intention can be moderated by individual and contextual factors, such as players' motivations, preferences, and social influences. For instance, the degree to which a game's design or mechanics align with a player's preferences and motivations can influence their intention to continue playing, as well as their likelihood of recommending the game to others or making in-game purchases. By understanding the factors that influence behavioral intention in video games, game developers can tailor their designs and marketing strategies to appeal to the diverse needs and preferences of players, ultimately promoting long-term engagement and success (Hamari & Tuunanen, 2014).

Moreover, researchers and educators interested in leveraging games for learning, health, or social change can use insights from behavioral intention research to inform the design and implementation of game-based interventions and initiatives.

2.4.4 Factors Affecting Behavioral Intention in Video Games

Several factors can affect players' behavioral intentions in video games, including individual characteristics, game-related factors, and social influences (Hamari et al., 2014). Individual characteristics such as players' motivations, preferences, and demographics can shape their intentions to continue playing, recommend the game to others, or make in-game purchases. For instance, players who are highly motivated by the challenge or enjoyment a game provides may exhibit a higher intention to continue playing.

Game-related factors, such as design, mechanics, narrative, and difficulty, can also influence players' behavioral intentions. For example, a game with compelling narrative and well-designed mechanics may encourage players to continue playing to explore the story and master the gameplay. Conversely, a game with poor design or excessive difficulty may lead to player frustration and decreased intention to continue playing (Law et al., 2009).

Social influences, such as the opinions and behaviors of other players, can significantly impact players' behavioral intentions in video games (Hamari et al., 2014). For example, players who perceive their friends and peers as enjoying a game or who are part of a supportive gaming community may be more likely to continue playing, recommend the game to others, or engage in in-game transactions. Moreover, the rise of social media and online gaming platforms has amplified the role of social influences in shaping players' intentions and behaviors. Various factors, including individual characteristics, game-related factors, and social influences, can affect players' behavioral intentions in video games. By understanding these factors, game developers, researchers, and educators can better tailor their designs, interventions, and strategies to engage and retain players, ultimately promoting long-term success and impact (Virvou & Katsionis, 2008).

2.4.5 The Relationship between User Experience and Behavioral Intention in Video Games

The relationship between user experience (UX) and behavioral intention in video games is crucial, as a positive UX can lead to increased player engagement, retention, and advocacy (Desurvire et al., 2004). As players have enjoyable and satisfying experiences, they are more likely to exhibit favorable behavioral intentions, such as continuing to play the game, recommending it to others, and engaging in in-game transactions.

Research has shown that various aspects of UX, including enjoyment, immersion, usage, and social interaction, can significantly influence players' behavioral intentions (Vorderer et al., 2003). For example, players who find a game enjoyable and immersive may be more inclined to continue playing, whereas those

who experience usability issues or lack social interaction may exhibit lower intentions to engage with the game. The relationship between UX and behavioral intention can also be moderated by individual and contextual factors, such as players' motivations, preferences, and social influences (Yee, 2006) For instance, the impact of UX on behavioral intention may be stronger for players who are intrinsically motivated to play for enjoyment and challenge, as opposed to those who are extrinsically motivated by rewards or external pressures.

The relationship between user experience and behavioral intention in video games is complex and multifaceted, with various aspects of UX and individual and contextual factors playing a role in shaping players' intentions and behaviors. By understanding and optimizing the user experience, game developers can promote positive behavioral intentions, leading to increased player engagement, retention, and advocacy. Furthermore, this understanding can inform the design and implementation of game-based interventions and initiatives in various fields, such as education, health, and social change (Virvou & Katsionis, 2008).

3 Methodology

3.1 Research Design

3.1.1 Description of the Research

This research aims to investigate the impact of localization on user experience and behavioral intention in mobile video games, focusing on the Indonesian market with Chinese mobile video game providers. The study utilizes a quantitative research design to examine the relationship between linguistic, cultural, and technical localization aspects and users' experience and behavioral intention with the total of 41 question.

3.1.2 Justification for the research

Given the rapid growth of the mobile video game market in Indonesia and the increasing presence of Chinese mobile video game providers, it is crucial to understand the role of localization in shaping user experience and behavioral intention. This research is justified as it contributes to the body of knowledge on localization strategies and their effectiveness in different cultural contexts. Moreover, the results of this study may guide mobile video game providers in optimizing their localization approaches to better cater to the preferences and expectations of Indonesian users, ultimately enhancing their competitive advantage and market penetration.