

## A Case Study of Game Localization in Iran: *Counter-Strike: Global Offensive* and *Zula*

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### Abstract

This study explores video game localization as a rapidly expanding field with significant potential in Iran's market, focusing on *Zula*, the Persian localized version of the video game *Counter-Strike: Global Offensive* (CS:GO). The comparison examines various aspects of the games, including loading pages, user interface, settings, game modes, gameplay mechanics, announcements and voices, character adaptation, maps and weapons, monetization strategies, resource systems, items and accessories, as well as bugs. The findings demonstrate that *Zula* effectively integrates Iranian cultural values through features such as localized maps, Persian-language text, and culturally neutralized characters, fostering a sense of national identity and enhancing the overall user experience. However, the study also identifies shortcomings in the localization process, particularly regarding writing direction and translation inconsistencies, emphasizing the need for improvements in translation practices.

**Keywords:** Game localization, *Zula*, *Counter-Strike: Global Offensive*

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## 1. Introduction

The video game industry is rapidly expanding, and localization holds significant potential in Iran due to the lack of foreign companies operating in the market. A study by Khoshsaligheh and Ameri (2020) indicates that Iranian gamers are dissatisfied with the current state of game localization. As a specialized field within Translation Studies, game localization involves adapting video games to suit different linguistic and cultural contexts. This field has experienced significant growth with technological advancements and increased internet access, which have broadened the global reach of video games and attracted a larger user base.

Several studies have been conducted on the comparison of games and their Persian localized versions. For example, Fatehi Rad and Bagheri Masoudzadeh (2021) explored the frequency of procedures adopted in the localization process of several popular games such as *GTA 5*, *Resident Evil*, and *Life is Strange* based on Tomaszewicz's (1993) model. In her research, Isapour (2016) examined how localizers encountered challenges and employed procedures during the localization process and found cultural challenge to be immense in Iran. Sheikh Baha'i (2013) examined the norms proposed by Toury (1995) and investigated the adequacy and acceptability of localized versions of video games in Iran. He found that Iranians tend to strive for adequacy rather than acceptability.

As highlighted in the literature review, research on video game localization in Iran remains limited and has primarily focused on challenges, strategies, and norms. This study examines *Counter-Strike: Global Offensive (CS:GO)*, one of the most popular games worldwide, and its Persian localized version, *Zula*. The *Counter-Strike* series is a team-based first-person shooter game, and *Zula* draws heavily from this globally acclaimed title, particularly in its gameplay mechanics and weaponry.

## 2. Background

The following sections address the definition of localization, with a particular focus on game localization, and explore its various modes. Additionally, a brief review of studies conducted on game localization is provided.

### 2.1. Localization

Although localization is taking place worldwide, scholars are not on the same page on its definition. Some try to draw a border between translation and localization and consider it a distinct field, while others see no difference between these two (Jiménez-Crespo, 2013). However, there are specific characteristics that are more or less agreed upon. According to Schäler (2012, p. 209), localization is defined as "the linguistic and cultural adaptation of digital content to the requirements and the locale of a foreign market; it includes the provision of services and technologies for the management of multilingualism across the digital global information flow". Dunne (2006) also specifies that the adaptation of digital products for different geographical, linguistic, and cultural contexts involves various processes. Localization encompasses translation, adaptation of non-textual elements, and consideration of cultural and regulatory factors. Essentially, localization focuses on the overall processes of product adaptation rather than mere tasks.

As Dunne (2006) noted, localization is one of the four integrated processes called GILT which stands for Globalization, Internationalization, Localization, and Translation. Internationalization "primarily consists of abstracting the functionality of a product away from any particular language so that language support can be added back in simply, without worry that language-specific features will pose a problem when the product is localized" (Jiménez-Crespo, 2013, p. 25). According to Jiménez-Crespo

(2013), the process of internationalizing a digital product occurs primarily during the development stage. Generally speaking, a process that ensures three points:

1. There is no cultural tie to the source digital products;
2. No matter in what language they are developed, normally in English, they do not depend upon that language;
3. Once the localization process has started, no technical adaptations will be made.

Jiménez-Crespo (2013) asserts that globalization encompasses the comprehensive range of business decisions and actions necessary for an organization to attain a genuinely international perspective and reach. It involves the adaptation of business practices and processes to effectively serve customers globally, accommodating their diverse languages, countries, and cultures.

While internationalization is a one-way process, globalization by contrast is cyclical, as it occurs before localization, during distribution, and after it, in the form of multilingual customer support. This process meets several objectives, from facilitating localization to establishing mechanisms for managing the multiplicity of bilateral and multilingual interactions (Jiménez-Crespo, 2013).

## 2.2. Localization Models

There are various models which are globally used by game producers to localize games. O'Hagan and Mangiron (2013) classify game localization models based on two criteria. The first one is the agent and the second one is the release date.

There exist two models based on the agent criterion. In the in-house model, localization is performed by the game producer, while in the outsourcing model, a localization institution or translator completes the task. The localized version of *Zula*, not released by the *Counter-Strike* producer, serves as an example of the outsourcing model. The in-house model incurs significant costs, and returning the budget to the producer's account can take a long time. For this reason, producers do not release games in all languages (O'Hagan & Mangiron, 2013).

In terms of release date, there are also two models. The first is the sim-ship model, which means producing the localized version simultaneously with the original version. The second model is post-gold, in which the company releases the original version first and then the localized version after several months or possibly a year. Both models have their pros and cons, but the post-gold model may be more efficient as it allows producers to fix bugs and release the localized version at a lower cost and with fewer issues since gamers play the original version and report potential bugs to the company (O'Hagan & Mangiron, 2013).

Many games are now available on more than one platform, and these are referred to as "cross-platform games" or "multiplatform games" (O'Hagan & Mangiron, 2013). In most cases, games are initially released on one or two platforms and later made available on additional platforms to reach a wider audience. As O'Hagan and Mangiron (2013) note, one important factor influencing this decision is the need to maintain or increase sales of specific consoles or hardware. However, it is preferable to develop the game from the outset so that it can be easily released on other platforms in the future, thereby avoiding duplicated coding tasks. Additionally, certain games are more efficiently played on specific consoles, prompting game developers to choose platforms based on the game's nature.

### 2.3. Studies on Localization

The research on video game localization in Iran has revealed significant insights into the complexities and cultural sensitivities involved in adapting games for local audiences. The study by Fatehi Rad and Bagheri Masoudzade (2021) explores the localization strategies employed by Iranian translators, identifying shortcomings in the process. Their research, grounded in Tomaszewicz's (1993) model, analyzes five popular computer games, revealing that literal translation is the most frequently used strategy, while omission and borrowing are less common. This highlights a tendency towards direct translation that may overlook cultural nuances.

Similarly, the work of Zoraqi and Mousavi (2023) focuses on cultural localization practices within two major Iranian software companies, Parnian and Gerdoo. Their qualitative analysis of six localized games compared to their original English versions uncovers that changes primarily address religious, socio-cultural, and socio-political contexts relevant to Iran. Specific strategies included removing cut scenes and altering soundtracks to align with local values.

Both studies emphasize that localization transcends mere translation; it involves a careful adaptation of content to resonate with local audiences while paying attention to legal and cultural considerations. The findings from Fatehi Rad and Bagheri Masoudzade's (2021) study complement those of Zoraqi and Mousavi (2023) by illustrating how localization practices are not only about linguistic accuracy but also about cultural relevance. The intersection of these studies underscores the necessity for translators to navigate complex cultural landscapes, ensuring that video games are both engaging and appropriate for Iranian players. This body of research contributes to a broader understanding of media consumption in culturally diverse contexts, highlighting the critical role of localization in the global video game industry.

Khoshsaligheh et al. (2023) in their article explore the evolving landscape of video game localization in Iran, addressing a significant gap in the existing literature. The research question centers on how cultural, linguistic, and technological factors influence the localization practices of video games in the Iranian context. To investigate this, the authors employed a qualitative methodology, conducting interviews with industry professionals and analyzing various localized games. This approach allowed for an in-depth understanding of the challenges and strategies involved in adapting foreign video games for Persian-speaking audiences. The results reveal that while there is a growing interest in game localization in Iran, several obstacles persist, including limited resources, lack of standardized practices, and cultural sensitivities. The study highlights the importance of collaboration between developers and translators to create culturally relevant content that resonates with local players. Ultimately, the findings suggest that enhancing localization efforts could significantly contribute to the development of the Iranian gaming industry, fostering greater engagement among Persian-speaking gamers and promoting cultural exchange through interactive media.

Regarding the role and agency of video games in Iran, Zoraqi and Kafi (2023) addressed a gap in Translation Studies concerning the sociological aspects of game localization. Their research question focuses on the visibility of translators within the localization process and their agency in practice. The introduction emphasizes the importance of localization in aligning video games with the socio-cultural values of target markets, noting that translators often have significant freedom to adapt content for local audiences. The method involves a textual analysis of four Persian localized video games from different genres, allowing for an examination of the translators' visible and invisible agency based on varying levels of interactivity. Results reveal that translators exert visible agency by clarifying game references and providing commentary, while their invisible agency is directed at interpreting semiotic elements within the games. The study concludes that the level of interactivity significantly influences how translators navigate their roles, ultimately impacting their visibility and agency within the

localization process. This research contributes to a deeper understanding of the complexities involved in video game localization in Iran.

### 3. Methodology

This study employs a qualitative approach to compare the English video game *Counter-Strike: Global Offensive (CS:GO)* and its Persian localized adaptation, *Zula*. Developed by Valve and Hidden Path Entertainment, *CS:GO* is a globally popular multiplayer first-person shooter game released in 2012. The game features two opposing teams – terrorists and counter-terrorists – competing in a variety of objective-based modes. Players can choose from nine distinct game modes or join community-hosted servers that offer custom maps and modes. Renowned for its intuitive user interface and robust gameplay mechanics, *CS:GO* has become a cornerstone of the global gaming community.

*Zula*, developed by Madbyte Games and distributed in Iran by Sourena Games, serves as a Persian localized adaptation of *CS:GO*, incorporating numerous cultural modifications to resonate with Iranian players. Unlike *CS:GO*'s minimalist design and universal appeal, *Zula* integrates culturally specific elements, such as Persian-language user interface captions, localized maps (e.g., Tehran and Persepolis), and Iran's national weapons. Additionally, *Zula* introduces monetization features tailored to the Iranian market, enhancing accessibility for local players while maintaining the competitive nature of the game.

The comparison between the English video game and its localized counterpart focuses on 13 features: 1) loading pages, 2) user interface, 3) settings, 4) game modes, 5) shooting modes, 6) zooming modes, 7) announcements and voices, 8) names and characters, 9) maps and weapons, 10) monetization strategies, 11) resource systems, 12) items and accessories, and 13) bugs.

### 4. Analysis and Findings

The following sections provide analyses of *CS:GO* and *Zula* across thirteen categories, including loading pages, user interface, settings, game modes, shooting modes, zooming modes, announcements and voices, names and characters, maps and weapons, monetization strategies, resource systems, items and accessories, as well as bugs.

#### 4.1. Analysis of Loading Page

The loading page is the first screen that gamers see when they launch the game, and it remains visible until the game has fully loaded. The loading page for *CS:GO* is quite basic (Figure 1), featuring only the game's logo.





Figure 2. CS:GO loading page

*Zula's* loading page, in contrast, is intricate and visually appealing, designed to capture gamers' attention. *Zula* releases new game seasons every few months, introducing updates and changes. Each season features a redesigned loading page, often inspired by national and religious events such as Nowruz or Ramadan. The current loading page for the Fatehan (Conquerors) season (Figure 2) prominently displays the flag of Iran in two locations: a large flag on the trench and a smaller one on the fighter's vest. Additionally, the organizational logo of the Iranian army is featured on the fighter's military beret, along with the Ranger logo on his arm, indicating one of the training courses for the Ranger Forces in Iran. Other localized elements include a 106 mm war cannon mounted on the jeep and a G3 weapon held by the fighter, both of which are national weapons of the Iranian army. This loading page is fully localized for the Iranian context, allowing gamers to feel a connection to their language and nationality from the very start of the game.

Figure 3. *Zula* loading page

#### 4.2. Analysis of User Interface

A user interface is where users interact with an application, website, or computer. An effective user interface should make the user's experience easy and intuitive while requiring minimal effort on the user's part to achieve the maximum desired result (Indeed, 2022). User interfaces typically include elements such as menus, start and exit buttons, and settings.

In terms of user interface, the main page in both games is simple enough for gamers to access the sections they need. In *Zula* (Figure 3), universal icons for settings, exit, rankings, and more are accompanied by captions in Persian, while *CS:GO* designers opted for icons alone (Figure 4). Although most gamers are familiar with these icons, providing captions can help avoid confusion for new players.

The *Zula* main page informs gamers about the status of servers, allowing them to choose a server based on their preferences. Server status bars indicate the number of players. New gamers can select the "Quick Start" button to begin playing immediately without needing to choose servers or rooms. In contrast, *CS:GO* does not allow players to select servers or rooms; they can only choose the mode and click on the play button to start the game with random players. While this may seem easier, offering more options enhances player choice. *Zula* players can see the names and ranks of their opponents before starting a game, whereas in *CS:GO*, this information is only available after the game begins. Additionally, *Zula* players can view general account information such as points, level, number of resources, and *Zula* Golds. *CS:GO* players can access their profile information by clicking on their profile picture at the top right of the page; however, this information is not as detailed as in *Zula* and features a simpler ranking system based on earned XP in each match.



Figure 3. *Zula* user interface

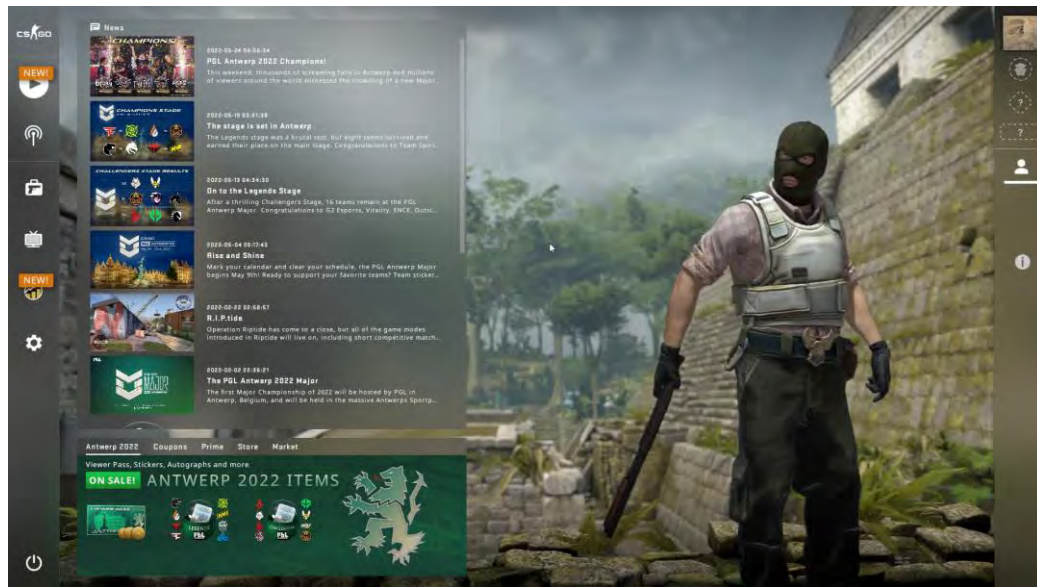


Figure 4. CS:GO user interface

### 4.3. Analysis of Settings

All games have a settings section that allows gamers to personalize the features according to their preferences. The settings section can include tabs for video, audio, gameplay, keyboard, and more. Depending on the game's complexity, each tab contains different features that can be customized.

*Zula* offers fewer customization options in the settings section (Figure 5), which may be due to the fact that *CS:GO*'s graphics (Figure 6) are significantly superior to those of *Zula*. Additionally, localizing the textual content of the settings is crucial, as it helps gamers understand which aspects of the game each feature modifies. Although *Zula* has translated the textual content of the settings, some sections still remain untranslated or are only transliterated which could be due to absence of established equivalents.

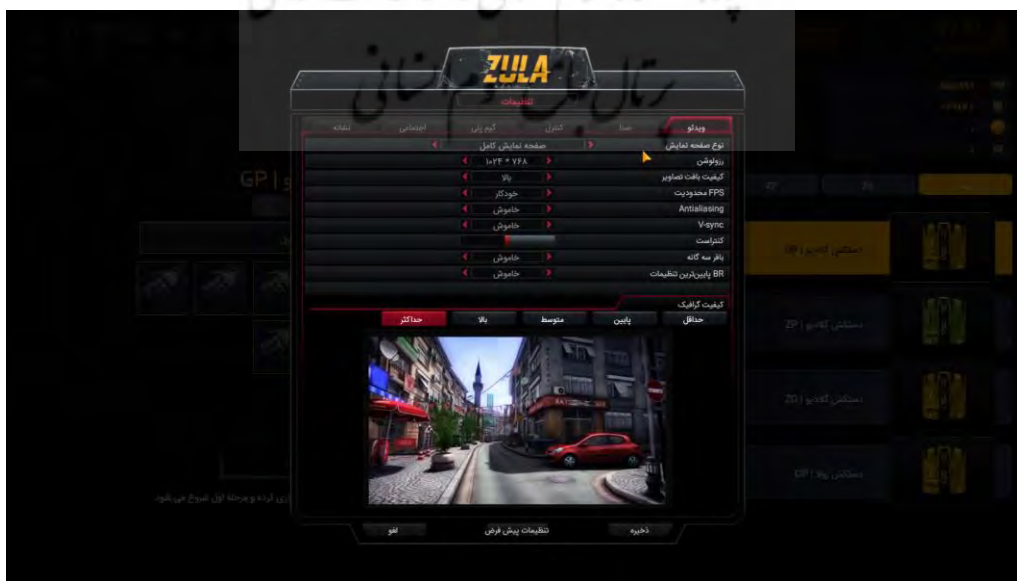


Figure 5. Zula settings section



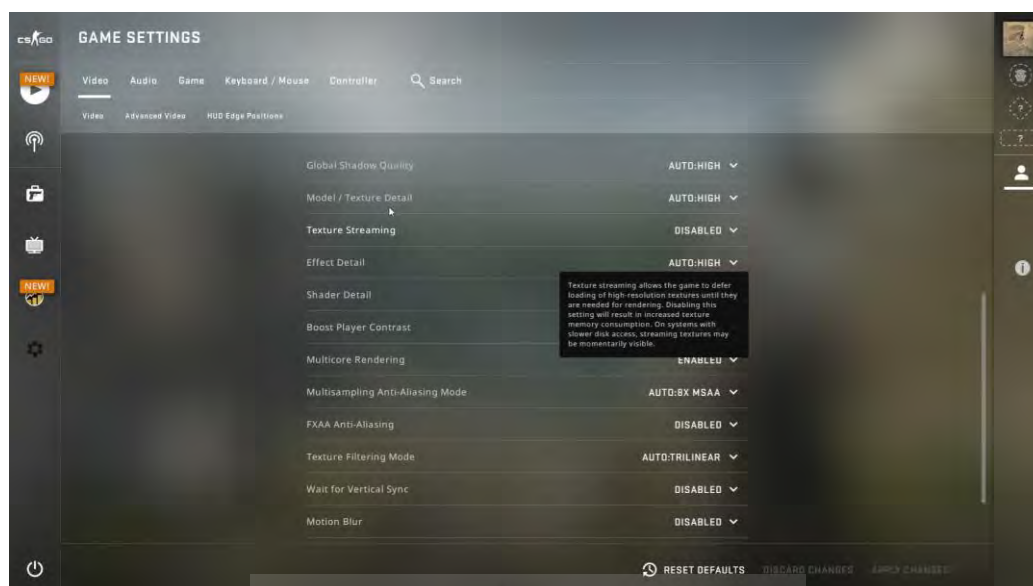


Figure 6. CS:GO settings

#### 4.4. Analysis of Game Modes

Both games offer different game modes that gamers can play with various rules and styles. A typical mode in both versions is “Counter-Terrorists vs. Terrorists.” However, *CS:GO* features more game modes, providing a wider range of player choices. It should be noted that *Zula*’s variety of game modes has increased since its release and will probably continue to grow over time.

#### 4.5. Analysis of Shooting Modes

*CS:GO* players must aim at the enemy and shoot with the left mouse button, whereas *Zula* players can activate automatic zooming and only need to control the shooting action. This option allows amateur gamers to play with less effort until they gain enough experience to play more professionally by managing both zooming and shooting actions. As a result, *Zula* is more accessible than *CS:GO* for amateur gamers.

#### 4.6. Analysis of Zooming Modes

In *CS:GO*, gamers cannot zoom in with all weapons for better accuracy, as this feature is limited to a select range of firearms. In contrast, *Zula* allows players to zoom in and out with most weapons. Zooming modes are among the options that can enhance user experience if offered in the localized version of games.

#### 4.7. Analysis of Announcements and Voices

*Zula* has added announcements and background voices to enhance the game’s engagement. In specific situations, such as when killing an enemy, these announcements appear alongside their verbal versions. For example, when a player scores a headshot, an announcement appears with the voice

saying “شلیک به سر” which translates into “headshot”. As players defeat various opponents in succession or take revenge on the enemy who killed them, they hear different announcements with varying voice tones, such as “قاتل سریالی” (serial killer) and “انتقام” (revenge). One of these announcements is shown in Figure 7.



Figure 4. Headshot announcement

There are also other voices in *CS:GO* which are preserved in *Zula*, in the form of dialogues that players can use to communicate with their teammates, such as “برگرد عقب” (get back!) or “آفرین” (bravo!), as well as system notifications that inform players of important game events, such as “بمب کار گذاشته شد” (the bomb has been planted). All Persian voices and announcements are recorded with a deep, bass voice which provides players with a more enjoyable gaming experience.

#### 4.8. Analysis of Names and Characters

As mentioned earlier, *CS:GO* and *Zula*, like their predecessors, feature two teams that each aim to eliminate the other. The teams in *CS:GO* are named “terrorists” and “counter-terrorists,” while in *Zula*, they are called “تبهکاران” and “ضربت” respectively. “تبهکاران” and “ضربت” are Persian words meaning malefactors and strike, respectively.

*CS:GO* and *Zula* can also be compared in terms of the outfit of the characters. In *CS:GO*, the characters in the “terrorists” team wear keffiyeh (Figure 8), which symbolizes Islamic culture and implicitly conveys that terrorists are Muslims. In *Zula*, however, the characters in the تبهکاران team have no Keffiyehs (Figure 9) and the Islamic associations are removed.



Figure 5. Terrorist team in *CS:GO*

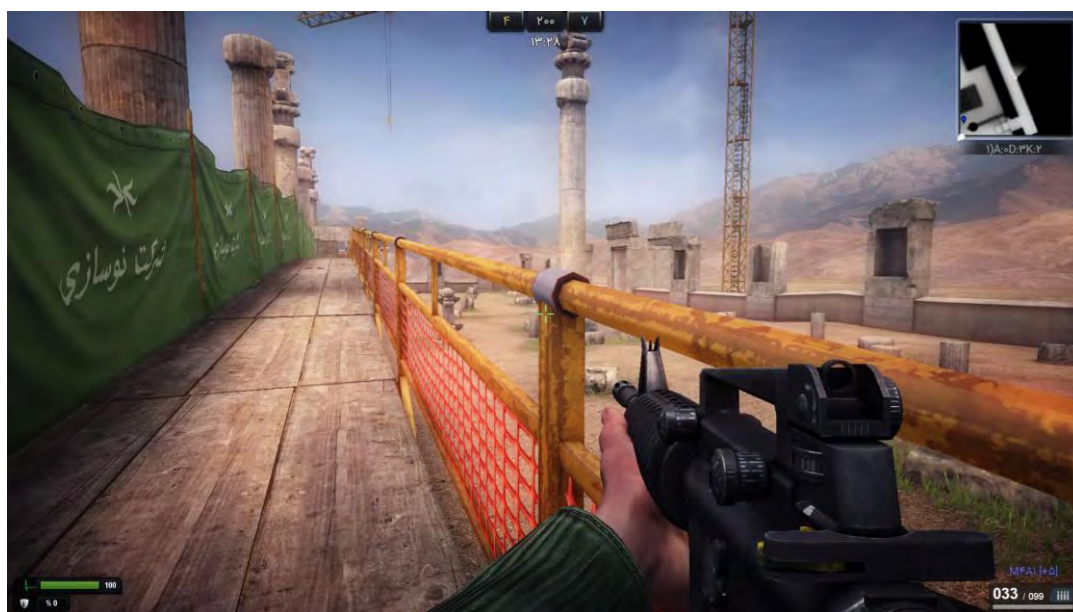


Figure 6. Tabahkaran team in *Zula*

#### 4.9. Analysis of Maps and Weapons

*CS:GO* and *Zula* share many maps and weapons. However, *Zula* includes several maps and weapons that reflect Iranian culture, which are absent in *CS:GO*. For instance, as shown in Figure 10, *Zula* features a map of Persepolis, highlighting Iranian history and culture.



Figure 7. Persepolis map in *Zula*

Moreover, the two games differ in the options available for weapon selection during gameplay. In *CS:GO*, all players start with the same budget, limiting their initial purchases to inexpensive weapons such as sidearms during the first round. Players can then earn additional funds by eliminating opponents and surviving rounds, meaning that acquiring better weapons depends solely on in-game performance rather than external financial investment. Conversely, *Zula* provides all players with a few free weapons but allows them to access more powerful weapons for a limited time through monetary payments, introducing a pay-to-win dynamic absent in *CS:GO*.

#### 4.10. Analysis of Monetization Strategy

The primary goal of the gaming industry appears to be entertaining people of various age groups while generating significant revenue. Localization serves as a key strategy for increasing revenue by broadening the target market. Since game localization is still in its early stages in Iran, there are numerous opportunities for translators and game developers to address existing gaps, potentially resulting in substantial profits.

In the case of *CS:GO* and *Zula*, while *CS:GO* is free to play, *Zula* restricts access to certain features unless payment is made. This monetization model undeniably has a negative impact on the gaming experience, as players who are unwilling to spend money are at a disadvantage. In *Zula*, players who invest more in purchasing weapons and items gain a significant advantage, making it easier for them to defeat others and enhancing their overall enjoyment of the game.

#### 4.11. Analysis of Resource Systems

In *CS:GO*, weapons have consistent destructive power for all players, ensuring a level playing field. In contrast, *Zula* allows players to upgrade their weapons by collecting resources such as iron, cobalt, titanium, and chromium (see Figure 11). These resources can be acquired either by playing the game or by purchasing resource chests. This system introduces a pay-to-win element, as financial investment can grant certain players a significant advantage over others. It is worth noting that *Zula* is not unique in enabling players to gain access to superior equipment through monetary investment. However,



some game development companies, particularly those backed by significant financial resources or affluent sponsors, place less emphasis on monetizing players directly.

An important aspect of *Zula*'s resource system is the uncertainty surrounding weapon upgrades. The probability of a successful upgrade is not guaranteed, and each attempt consumes resources regardless of the outcome. Players can increase their chances of a successful upgrade by purchasing specific in-game items, adding another layer of financial incentive to the gameplay mechanics.



Figure 8. Weapon-upgrading menu in Zula

#### 4.12. Analysis of Items and Accessories

*Zula* introduces a wide range of skins, items, and accessories that allow players to personalize their weapons and engage with opponents in unique ways (Figure 12). For instance, players can spray humiliating phrases on the bodies of defeated opponents, fostering a competitive atmosphere and encouraging arguments or boasting about gameplay, which enhances the entertainment value of the game. Additionally, players can customize their weapons with various skins and accessories, which not only improve their visual appeal but, in some cases, can also enhance weapon accuracy. The sale of these items generates substantial revenue for the game developers, enabling further enhancements to the game's features and overall quality.



Figure 9. Zula store offering items and accessories

#### 4.13. Analysis of Bugs

Quality control is a standard stage in game development, during which experienced players and technicians test the game to identify and resolve issues, ensuring it is released with minimal bugs. While many bugs are addressed before launch, some may emerge during gameplay under specific conditions. In the context of localization, several errors warrant attention.

One significant issue arises from the unique characteristics of languages, such as writing direction. Persian, for example, is written from right to left, unlike English. However, *Zula*'s developers have often neglected this fundamental aspect. In many instances, textual content has been translated without adjusting for the correct writing direction. As shown in Figure 13, punctuation marks are incorrectly placed, reflecting the orientation of English text rather than Persian.

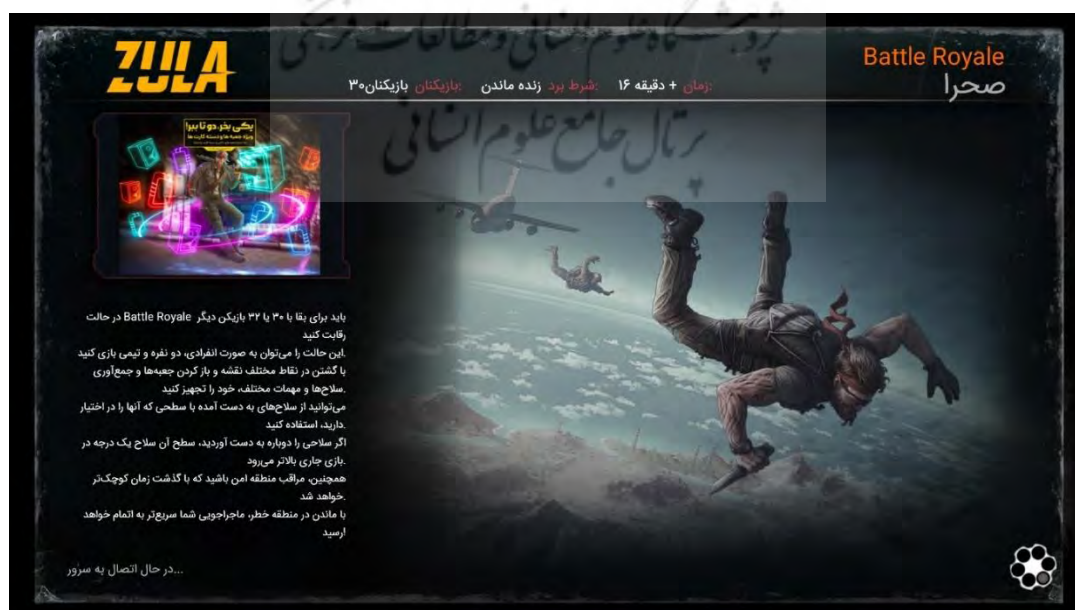


Figure 10. Incorrect placement of punctuation marks in Zula

Another issue concerns the inappropriate use of literal translation. While scholars such as Vinay and Darbelnet (1995) and Newmark (2001) advocate for literal translation as an effective strategy under certain conditions, it is only suitable when the resulting text sounds natural in the target language. For instance, in one section displaying the number of players in the game, the English phrase “Players: 30 Players” was translated into Persian as “بازیکنان: بازیکنان ۳۰” which sounds unnatural and redundant. A more appropriate localization would be “تعداد بازیکنان: ۳۰ نفر” which aligns with Persian linguistic norms. This example highlights the importance of contextual and cultural appropriateness in the localization process.

Beyond linguistic issues, *Zula* also suffers from visual inconsistencies. One notable example involves the popular map called “کشتی” (meaning “ship”). As gamers wait for the game to load, a loading screen appears featuring Turkey’s national flag displayed on a massive ship (Figure 14). However, when the loading screen disappears, the game begins with the localized version of the ship which features Iran’s national flag (Figure 15). These discrepancies undermine the coherence of the game’s visual and cultural elements.

Localization is inherently dynamic, requiring meticulous attention to ensure alignment across all semiotic channels. A lack of such alignment, as demonstrated in these examples, can detract from the overall quality of the gaming experience.



Figure 11. The ship with the national flag of Turkey





Figure 12. The ship with the national flag of Iran

## 5. Conclusion

*Zula* exemplifies both the accomplishments and the challenges within Iran's emerging localization industry. The game demonstrates a capacity to address cultural and social sensitivities by reframing stereotypical portrayals and tailoring content to align with the values of Iranian gamers. However, technical and linguistic shortcomings, such as issues with writing direction and grammatical inaccuracies, underscore the developmental nature of Iran's localization sector, highlighting the need for greater expertise, resources, and industry maturity. Despite these challenges, *Zula's* widespread popularity and significant economic impact reveal a strong demand for culturally resonant gaming experiences in Iran, suggesting substantial potential for industry growth if investments are made in skill development, technological advancements, and strategic planning.

To advance the Iranian localization industry, leveraging local experiences and adopting best practices from more developed markets could help avoid common pitfalls and achieve higher standards more efficiently. A critical aspect of this development lies in education and training. Introducing specialized courses in game localization within Translation Studies programs could equip future professionals with the skills needed to compete internationally. Such academic initiatives, from undergraduate to doctoral levels, would create a highly skilled workforce capable of elevating the industry to meet or exceed global standards.

While *Zula* may not yet represent the pinnacle of Iranian localization, it serves as a valuable case study. The insights gained from its successes and limitations provide a solid foundation for improving localization practices, raising industry standards, and strengthening the economic potential of the localization field in Iran. With strategic investment and a focus on education, the Iranian localization industry can evolve into a sophisticated and competitive sector, poised for sustainable growth on both local and international stages.



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