

Investigating Smartphone Adoption in Iran: A Comparative Analysis of Student and Business Perspectives

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Abstract

This study aims to comprehend the perspectives of students and business professionals regarding the utilization of smartphones in the Islamic Republic of Iran. The research delineates the impact of this emerging technology on cultural aspects, specifically in the realms of entertainment and business practices. Furthermore, the study proposes an effective marketing strategy aimed at motivating these two distinct groups to opt for smartphones over conventional devices. Utilizing quantitative research methods, 143 questionnaires were disseminated among students and business individuals in Tehran, Gorgan, and Mashhad. The obtained results were subjected to analysis through SPSS software to validate the proposed hypotheses. The findings reveal that student exhibiting a propensity for using smartphones for educational and entertainment purposes. Moreover, students display a higher inclination towards smartphone usage compared to business professionals, and female students are more inclined to use smartphones for entertainment than their male. Notably, business individuals favor face-to-face communication over relying solely on smartphones for business matters. In terms of marketing strategies for telecom providers, the results advocate for incentivizing plans, such as free calls and installment payment options, as effective means to attract a broader customer base within both student and business demographics.

Key words: Smart phone, Entertainment, Business transaction, Iran

Introduction

In contemporary society, mobile phones have become indispensable tools for communication technologies, fundamentally altering the dynamics of interpersonal interactions and relationship-building in the modern world [1][2]. The rapid evolution of new technologies has led to the disappearance of many traditional businesses while simultaneously giving rise to new opportunities and enterprises.

Iran, as a developing nation with a predominantly young population, faces an urgent need for effective communication tools. Recent statistics indicate a substantial youth demographic, with over 60 percent of the entire 80 million population being under 30 years old [3]. This demographic shift emphasizes the critical role of communication technologies in catering to the needs and preferences of the youthful population.

The primary objective of this study is to investigate and consumer behavior of students and business individuals toward the use of smartphones in the Islamic Republic of Iran. The research aims to elucidate how this new technology influences cultural elements such as entertainment and business behaviors, highlighting the distinctions between the two groups of business professionals and students. Additionally, the study proposes an effective marketing strategy to encourage both groups to opt for smartphones over conventional mobile phones.

By examining the divergent perspectives and preferences of students and business individuals, this research seeks to contribute valuable insights into the distinct ways in which smartphones are integrated into the lives of these two demographic groups in Iran. Moreover, the study endeavors to provide practical recommendations for marketing strategies that can effectively promote the adoption of smartphones, aligning with the specific needs and preferences of Iranian consumers.

Literature Review and Hypothesis Development

Mobile phones are widely used and accepted in Iran, especially among the young and educated population. According to the latest statistics, Iran has more than 135 million mobile subscriptions, which is higher than its total population of 80 million [4].

Mobile phones have various impacts on the education and business sectors in Iran, as they facilitate access to information, communication, and learning resources, as well as improve the efficiency, productivity, and competitiveness of various enterprises and industries [1].

Ruiz-Herrera et al.[5] research focuses specifically on smartphone adoption among Iranian students, utilizing TAM and TPB frameworks. It highlights the importance of attitude, subjective norms, and perceived behavioral control alongside perceived usefulness in influencing student smartphone use.

Studies by Hosseini [6] and Tavakoli et al. [7] explore the influence of cultural values and religious norms on internet and mobile phone usage in Iran. Considering these factors is crucial for understanding smartphone adoption beyond economic or technological factors.

However, mobile phones also pose some challenges for the acceptance of mobile phones in Iran. One of the main challenges is the cultural and social context, which may influence the attitudes and behaviors of users toward mobile phones, such as their preferences, motivations, and values [1]. Another challenge is the technical and infrastructural condition, such as the network coverage, speed, and cost [2].

In addition, face-to-face communication is still important and valued in Iran, especially in the business sector, where it is considered more effective, trustworthy, and respectful than mobile phone communication. Some studies have shown that business people in Iran prefer face-to-face communication rather than using just mobile phones for business purposes, because they can solve problems more easily, build rapport and relationships, and negotiate better deals [1]. Table 2-1 shows the hypotheses.

Table 2-1 Hypotheses for Student Group and Business Group

Hypotheses for Student Group
Hs1: 'Trust of new (communication) technology affects the acceptance of smart phones'
Hs2: Individuals possessing both mobile phones and internet connectivity exhibit a heightened inclination towards owning smartphones.
Hs3: Entertainment - "Male students within the age range under 25 years old tend to utilize phones and smartphones as entertainment appliances".
H4: Education - "The majority of students will utilize mobile phones (cellular phones and smartphones) for educational purposes".
Hypotheses for Business Group
Hb1: "Trust in new (communication) technology affects the acceptance of smartphones".
Hb2: "The importance of face-to-face communication in Iran and the role of mobile phones in facilitating business affairs".

Research Methodology

This study employed a quantitative research design [8] to examine the use of smartphones as entertainment devices by students and as business tools by professionals. This method was chosen due to its ability to collect, analyze, and generalize quantifiable data to a larger population.

Data Collection

The data were collected through a self-administered survey distributed in the two major Iranian cities (Mashhad and Tehran) and the one medium-sized city (Gorgan). Convenience and snowball sampling techniques were employed to reach participants. For the student group, the survey was distributed within university campuses and dormitories, and the business professionals were distributed mostly among the own businessmen in Gorgan. A total of 143 valid responses were obtained, with 84 from students and 59 from business professionals.

Results Analysis

In this section, we analyze the data gathered from the surveys. We divided the people into two groups of students and business people. Our main objective for the students was to see how much they tend to use their smartphones as an entertainment device. For the business people group, the survey was designed to understand how much their business affairs depend on their smartphones. In the following paragraph, we show the analysis of the student group survey results

Result for Student Group

The figure 1, figure 2 and figure 3 shows the characteristics of the student respondents.

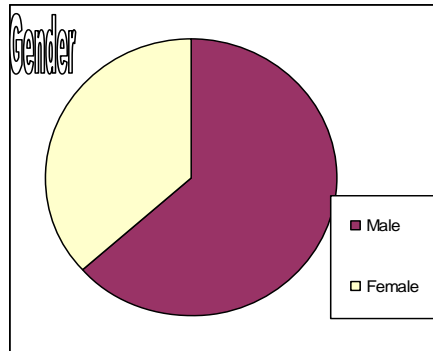


Figure (1) Gender percentage of student group

Figure 1 shows 59 percent of respondents are male.

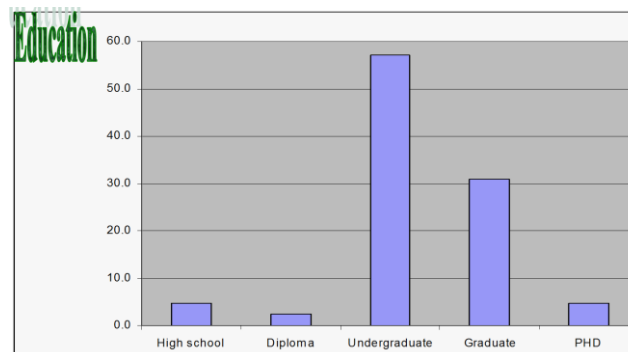


Figure (2) Education level of student group

Figure 2 shows that more than 90 percent are undergraduate or higher.

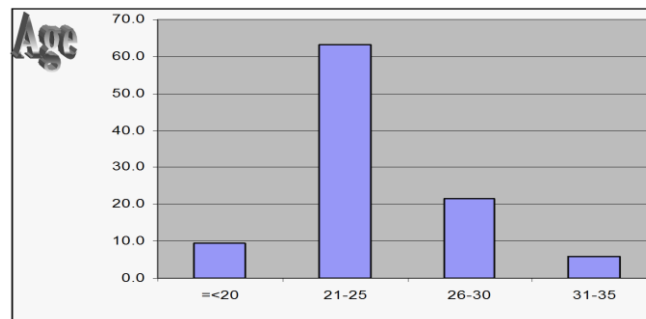


Figure (3) Age distribution of respondents

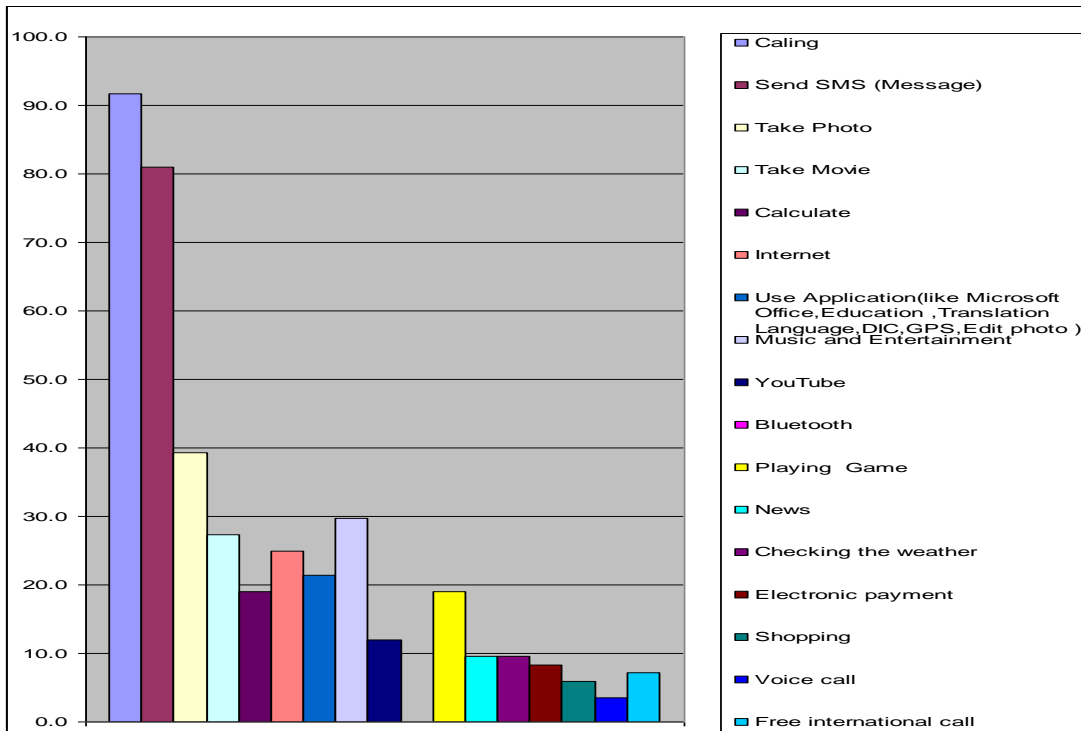


Figure 4 usage of mobile phone

From Figur 4 we could recognize how much students use their cellphones for their Entertainment and hobbies like taking photos, take movies, and viewing YouTube.

Using Applications (like Microsoft Office, Education, translating languages, Dictionaries, GPS, editing photos) was more than 20 percent. Music and Entertainment was almost 30 percent and Playing Game was 19 percent. Bluetooth which in Iran people use Bluetooth for sending music, movies and pictures was quite popular.

Test of Hypotheses

I tested my main hypotheses using cross tabulations of questionnaire items related to the hypotheses.

Hs1: 'Trust of new (communication) technology affects the acceptance of smart phones'.

Testing Hs1 entailed conducting cross-tabulations between the question "Trust in new (communication) technology affects the acceptance of smartphones" and other inquiries related to potential smartphone features. These features encompassed fixed internet charges, installment payment options, and free local calls. Regrettably, none of these comparisons produced statistically significant results, with a p-value greater than 0.05. Consequently, there is insufficient evidence to assert that trust in new communication technology directly influences smartphone adoption within this sample of student people. Therefore, Hs1 is not supported.

Hs2: Individuals possessing both mobile phones and internet connectivity exhibit a heightened

inclination towards owning smartphones.

To examine this hypothesis, cross-tabulations were conducted involving the question "How long do you use the Internet every day?" in conjunction with inquiries such as "Do you believe that utilizing smartphones can enhance your educational experience?" and "Do you find smartphones enjoyable?" The statistical analysis provided significant support for this hypothesis

H3: Entertainment - "Male students within the age range under 25 years old tend to utilize phones and smartphones as entertainment appliances."

To investigate this hypothesis, cross-tabulations were executed involving Age and the variables Music & Entertainment (P value = 0.132) , Age and Game (P values = 0.05), revealing that younger students express a preference for using cell phones for gaming activities. Additionally, cross-tabulations of Gender with Music & Entertainment (P value = 0.019) and Gender with Games (P value = 0.001) were conducted.

The findings indicate that female students are inclined to employ cell phones for music and entertainment purposes more frequently than their male counterparts. Furthermore, females exhibit a greater interest in engaging in gaming activities on their phones.

H4: Education - "The majority of students will utilize mobile phones (cellular phones and smartphones) for educational purposes."

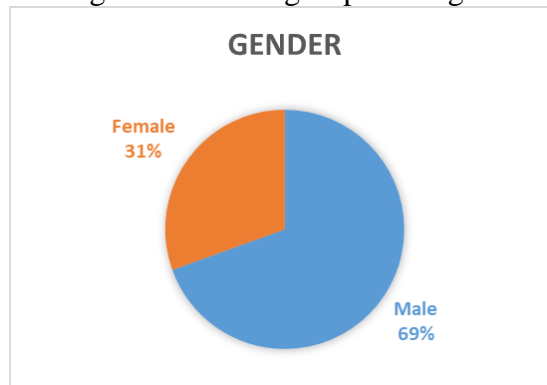
The results indicate that a significant proportion of respondents (75 percent) hold the belief that smartphones can enhance their educational experience. Consequently, this hypothesis is supported.

Business Group Analysis

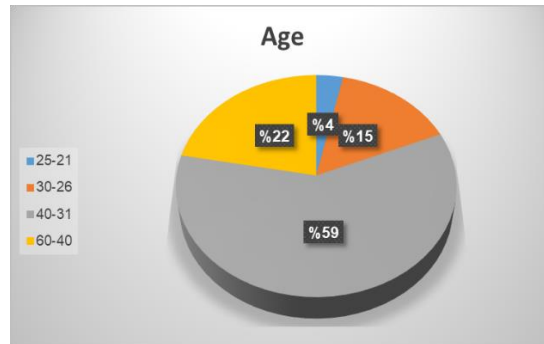
Characteristics of Business Respondents

The survey was distributed among 59 business group, with 41 male participants and 18 female participants.

Figure 4 shows Gender percentage of Business group and Figure 5 Age distribution responds.



Figure(4) Gender percentage of Business group



Figure(5) Age distribution responds

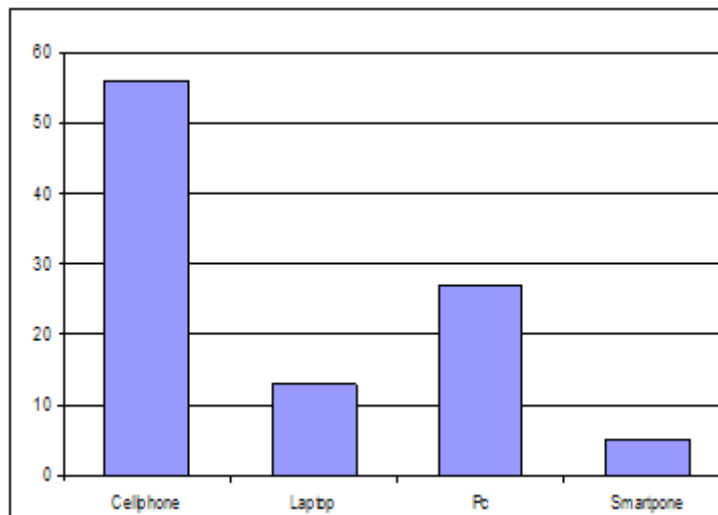


Figure (6) Ownership of mobile phones and PCs

Figure 6 shows the majority of respondents own cell phones and PCs, while laptops and smartphones are owned to a lesser extent.

Tests of Hypotheses

Hb1: “Trust in new (communication) technology affects the acceptance of smartphones.”
 Testing HB1 involved cross-tabulations between Question "Trust in new (communication) technology affects the acceptance of smartphones " and other questions regarding potential smartphone features, including fixed internet charges, installment payment options, and free local calls. Unfortunately, none of these comparisons yielded statistically significant results. As indicated by p-values of 0.240, 0.207, and 0.105, respectively, there is insufficient evidence to conclude that trust in new communication technology directly influences smartphone adoption among this sample of Iranian business people. Therefore, HB1 is not supported.

Hb2: “The importance of face-to-face communication in Iran and the role of mobile phones in

facilitating business affairs.”

To explore the importance of face-to-face communication and the role of mobile phones in Iranian business, participants answered two key questions:

Qb1 - Which one is the most useful tool for your business purpose?

Personal meeting Cell phone PC (include laptop) Samarth phone Why?

Qb2 -Do you think it is important to contact and meet people personally for business transaction?

Yes No Why?

Respondents could choose more than one option.

The results clearly demonstrate that personal meetings reign supreme as the preferred method for conducting business. Interestingly, even phone calls ranked higher than technological tools like cell phones, PCs, or smartphones. This preference aligns with the emphasis on direct interaction and relationship building in Iranian business culture.

Further analysis delved into trust in new communication technology regarding data security and privacy concerns. Questions investigated participants' comfort with:

- Saving secret information on the cell phone
- Likelihood of losing the mobile phone
- Possibility of another person using mobile information for business and profit

However, these analyses did not yield statistically significant results. This suggests that, while trust in technology may play a role, other factors likely influence Iranian business people's reluctance to rely solely on mobile devices for business purposes.

Marketing Strategy for student and Business Persons

If the phone company provides these facilities for smartphones, are you interested in buying a smartphone?

- Fixed charge amount for the internet every month
- Installment payments every two months (three times in total)
- Free call to friends or family for 10 hours in the same city

Results show that 61% of business people would agree to buy a smartphone if they could pay a fixed charge for the internet. Similarly, 61% would agree to purchase a smartphone if installment payments were allowed every two months.

This suggests that Iranian consumers find flexibility in payment conditions important. Additionally, the free call plan is well-received among Iranian business people who prioritize family values. In addition, result shows the business people are more interested to the second and third plan rather than the students.

This analysis provides valuable insights into the preferences and considerations of business respondents regarding smartphone adoption and usage.

Conclusion

In conclusion, the mobile phones have significant and diverse impacts on the education and business sectors in Iran, but they also face some challenges for their acceptance and adoption. Face-to-face communication is still important and valued in Iran, especially in the business sector, where it is considered more effective, trustworthy, and respectful than smartphone communication. Therefore, it is important to address these challenges and to leverage the opportunities and benefits of the mobile phones, as well as to maintain and enhance the quality and quantity of face-to-face communication, in order to improve the social and economic development of Iran.

This research is the first study that considers the influence of using smartphones in consumer behavior in the Islamic Republic of Iran, more specifically among students and business individuals. It was shown how the smartphone technology can make an influence on consumer behavior for educational, entertainment, and business transactions. A deep understanding of consumer needs and cultural behaviors in the targeted groups will help manufacturers to develop an effective sales strategy for their goods and services in the Islamic Republic of Iran.

Regarding the marketing strategy for the company, we found that the business people were more eager to accept smartphones than the students. Especially for the second plan of the installment payment in three times and the free call plan, the business people were more eager to accept smartphones than students.

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