Competitive strategies of mobile applications in online taxi services

The cases of Snapp and Tap30 in Iran

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Abstract

Purpose – The purpose of this paper is to analyze competitive strategies implemented by two Iranian taxi service mobile apps – Snapp and Tap30 – in different domains by using the modified version of the generic strategies proposed by Porter and focusing on the online taxi market.

Design/methodology/approach – Due to the in-depth nature of competitive strategies in ridesharing platforms, the study employs comparative case research to understand the dynamics of such businesses in terms of developing mobile applications. By comparatively investigating competitive strategies of two Iranian mobile apps in ridesharing business, it is possible to extract rich knowledge about the commonalities between cases and the specificities of each of them to reach success in this market.

Findings – Although Snapp has made significant efforts to provide various services to passengers, the findings show that it has not been able to do it intelligently, as it has failed to identify customers' new needs. In addition, Snapp is trying to keep its position in the Iranian market by monopolizing it. On the contrary, Tap30 has paid attention to the intelligence of services in order to explore and exploit new opportunities, so that it can be distinguished from its rival and gain competitive advantage. The proper and timely use of artificial intelligence by these apps will be a major issue that will greatly determine their future success on the market, according to the conclusion of this work.

Research limitations/implications – Like other qualitative researches, this study also has limitations in generalizing findings to other communities. For this purpose, it is recommended that the results of this study be generalized more cautiously. Moreover, access to some data in the digital market of Iran was one of the significant issues that researchers faced with. However, using a large number of different databases, attempts were made to reduce such limitations.

Practical implications – Applying the competitive strategies introduced in the present research, platform managers would be benefited from using the insights provided here. In particular, they should understand the fact that competitive advantages are deeply tied to a combination of product/service differentiation, costs leadership and marketing strategies rather than focusing on just one dimension.

Originality/value – Focusing on the strategy literature, the paper contributes to business debates on ridesharing platforms, especially in an emerging market, Iran. This study also moves digital entrepreneurship literature forward in online taxi services by shedding light on their competitive strategies in an emerging economy.

Keywords Competitive strategy, Mobile applications, Emerging markets, Ridesharing, Digital business

Paper type Research paper

1. Introduction

Since the early 1990s, developments in digital technologies have resulted in emerging opportunities, thereby creating new markets in many countries(Akhlaq and Ahmed, 2015; Sousa and Rocha, 2018). The effects of these transformations have manifested themselves in different industries and especially in service-based businesses (Hagiu and Spulber, 2013; Agyapong *et al.*, 2018; Asnawi *et al.*, 2018). As a matter of fact, new technologies have acted as a revolutionary force to the existing markets (Anderson and Tushman, 1991; Christensen, 1997, 2003). They have reduced entry barriers, so many new small firms are able to enter the market (Valero-Pastor and González-Alba, 2018).

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The rapid growth of smartphones around the world – after the popularity of the internet and digital technologies – has caused the rise of "Internet-enabled sharing platforms," namely "the sharing economy"(Choudary *et al.*, 2015; Reillier and Reillier, 2017). As a critical consequence, one may argue that in this new economy, every individuals capable of earning money by sharing their "under-utilized resources" (Guo *et al.*, 2018). In other words, sharing economy has created an excellent space for market intermediaries (Hagiu and Spulber, 2013), and it also provides new ways of collaborative consumption for users (Hamari *et al.*, 2016). Sharing economy platforms can deliver value to both customers and entrepreneurs by using innovative business models based on digital technologies (Parker *et al.*, 2016; Emami and Dimov, 2017; Emami *et al.*, 2019). There is some evidence of the effects of sharing economy on different industries such as hotel industry (Zervas *et al.*, 2017), tourism (Ivanov and Ivanova, 2016) and online taxi services (Wallsten, 2015; Skok and Baker, 2018), amongst many others.

Mobile app-based taxi services are considered as popular e-services among many countries, owing to new opportunities provided by sharing economy (Rasheed *et al.*, 2018). They easily connect the passenger and taxis as fast as they can in an affordable manner (Weng *et al.*, 2017), and result in an acceleration of the globalization of public transport (Saadah *et al.*, 2017). For example, as stated by Hall and Krueger (2018, p. 706), "the number of active Uber driver-partners approximately doubled every six months from the middle of 2012 to the end of 2015. At this growth rate, every American would be an Uber driver within five years."

Using a smartphone app, these e-services allow individuals to request and accept a trip by a private car (Aarhaug and Olsen, 2018). The number of such services is growing around the world, and some of them include "Uber," "Lyft," "Grab" and so on (Ooi *et al.*, 2018). Many of these mobile apps compete in the same market – Uber and Lyft in the USA, for instance – and they are continuously thinking about how they can improve their business position by employing competitive strategies and improving their mobile applications (Cramer and Krueger, 2016). As time goes on, the competition between these services is intensifying. The success of the competition depends on how they deliver a higher value to their customers (Porter, 1985).

The fact is that the performance of such apps in markets depends heavily on their competitive strategies, in which they adequately respond to the demand and technological change (Sher and Lee, 2004). In order to address the competitive strategies of firms, the generic strategies framework is one of the most popular in this area (Porter, 1980, 1985). Furthermore, it is an appropriate typology which is highly relevant for e-businesses (Kim *et al.*, 2004). As Collins and Winrow (2010, p. 310) clearly pointed out, e-businesses "should also consider implementing an integrated strategy which combines elements of cost leadership, differentiation and focus elements of Porter's framework." Some scholars have attempted to reorganize the generic perspective by including modifications of this framework based on the nature of digital businesses (Rashidirad *et al.*, 2013, 2014). While this framework can open insightful avenues for the understanding of dynamism in ridesharing platforms, surprisingly it is neglected in the current literature in emerging markets like Iran.

Using the modified version of the generic strategies proposed by Porter, the paper aims to analyze competitive strategies of two Iranian mobile apps – Snapp and Tap30 – in different domains. By accurately describing the apps' features, the present research also provides a solid comparison in which the unique characteristics of every app are recognizable. Furthermore, it has been tried to delineate how the digital apps attempt to compete in a volatile environment by using their competitive strategies. Focusing on the strategy literature, the paper contributes to business debates on ridesharing platforms, especially in an emerging market, Iran. This study also moves digital entrepreneurship

literature forward in online taxi services by shedding light on their competitive strategies in an emerging economy. According to the purpose of this study, the research question is articulated as follows:

RQ1. How do major ridesharing platforms in Iran – Snappand Tap30 – compete with each other by using different competitive strategies?

The present research is structured as follows: first, this research presents the building blocks of the generic framework, which belongs to the works of Porter (1980, 1985), as it seeks to add to our understanding about competitive strategies of mobile apps in the Iranian online taxi services. As such, the ground to make sense of competitive strategies of the mentioned mobile apps will be prepared. Second, the research method will be described by explaining the foundations of the comparative case study. At this stage, this work shows how a comparison between two strong Iranian cases in ridesharing platforms can create promising insights into the strategy literature. Third, the analysis of collected data will be provided separately for each mobile application. In other words, using the modified version of Porter's generic framework, it has been tried to show how each of these mobile apps steers their competitive strategies by focusing on different domains. Finally, by discussing the study's implications, it is shown how some specific strategies can affect the future of any of these digital firms.

2. Context: ridesharing platforms in Iran

Due to the widespread use of the internet in Iran, digital businesses are enjoying significant growth (Dorigo, 2016; Emami, 2017). Revenues from platform in Iran have been considered by many official national and international news agencies (Arbatani *et al.*, 2018; Emami and Khajeheian, 2018). The current policies of the Iranian government tend to support national startups to move toward economic growth in the country. In this regard, reports indicate that the number of accelerators in Iran is increasing dramatically. As a result, entrepreneurial firms are emerging and a significant number of them become stable and play an important role in wealth creation (Saeidikia, 2018). For example, it is noteworthy that in 2013 only 130 new businesses were active in the digital market, whereas the figure reached 41,130 in 2017 (Parsapour, 2017).

Online taxi services, like for many developing and developed countries, have been considered as a great success in the Iranian digital market. Nevertheless, although the number of ridesharing platforms has increased significantly in Iran, very few have achieved financial success. It should be noted that the number of online journeys in Iran exceeds 2m per day. Among the most famous companies they offer these services, some examples are Snapp, Tap30, Dinnng and Carpino. However, more than 85 percent of the market share belongs to the former two ones (i.e. Snapp and Tap30). Snapp started its business in 2014 while Tap30 entered the market two years later. It is obvious that one of the key drivers for success in Iran's online taxi competition is their strategies for developing and optimizing their mobile applications.

For this reason, the two cases are selected for addressing competitive strategies in ridesharing platforms. In the following, the popularity of the two mentioned cases in the Iranian market is shown in Figure 1. More specifically, Table I shows the number of installed mobile taxi applications in Iran-based data extracted from various mobile app stores. Accordingly, it is evident that Snapp and Tap30 are, respectively, ranked first and second in the Iranian market regarding their popularity and they totally hold 88 percent of market in Iran. The development speed of two digital firms is shown in Figure 2.

3. Theoretical framework

To assure the achievement of a company in the future, it needs to act better than its competitors. In other words, to be in possession of a competitive advantage (Porter, 1985).

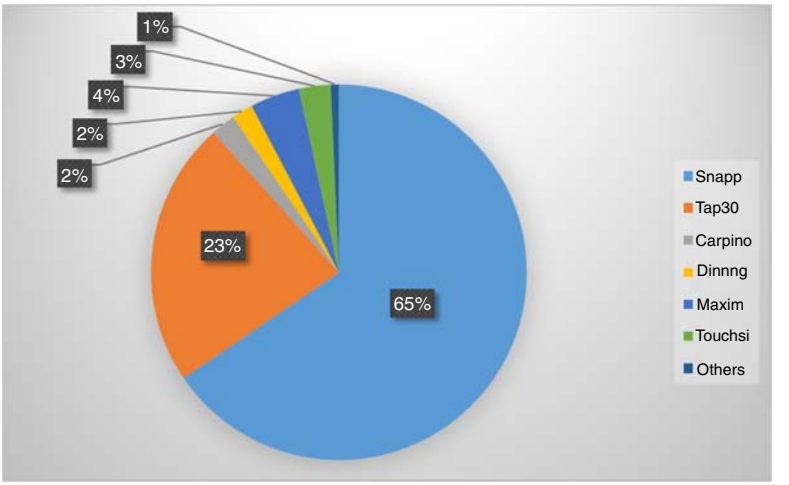


Figure 1.
The percent of installed taxi applications in Iran (until December 31, 2018)

Source: Estimated from various databases by the authors in December 2018

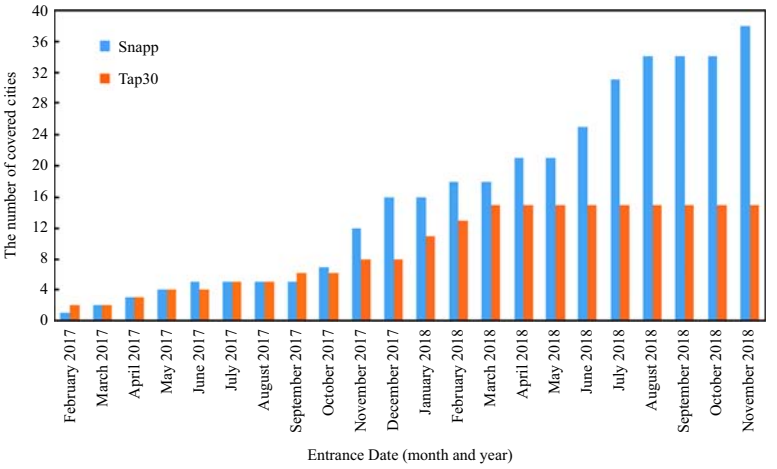
	Online taxi services in Iran						
Mobile app stores	Snapp	Tap30	Carpino	Dinnng	Maxim	Touchsi	Others
Google play	1,000,000	500,000	100,000	50,000	0	100,000	–
Cafebazaar	7,000,000	2,000,000	100,000	100,000	500,000	200,000	–
Myket	1,000,000	300,000	46,000	8,000	0	34,000	–
Sibapp	1,006,112	533,631	50,677	78,438	113,119	67,424	–
iranapps	282,000	70,000	21,000	1,000	10,000	0	–
Appstore	1,008,285	536,583	50,710	78,657	113,278	67,441	–
Total	11,296,397	3,940,214	368,387	316,095	736,397	468,865	120,813
Percentage	65	23	2	2	4	3	1

Source: Collected by the authors in December 2018

Table I.
Number of installed online taxi services in Iran

Being better than rivals is undoubtedly one of the main concerns of organizations and companies (Shimizu, 2012; Grant, 2016; He *et al.*, 2019). To achieve such a goal, each company needs to take advantage of a proper business strategy (Rashidirad *et al.*, 2017; Anwar *et al.*, 2018). In general, "a company's competitive strategy deals exclusively with the specifics of management's game plan for competing successfully – its specific efforts to please customers, strengthen its market position, counter the maneuvers of rivals, respond to shifting market conditions, and achieve a particular competitive advantage" (Gamble *et al.*, 2013, p. 93). Therefore, a business strategy "is more likely to leadto a competitive advantage if it allows firms to either perform similar activities differently or perform different activities than their rivals that result in creating more value or offering similar products or services at lower cost" (Rothaermel, 2017).

In this regard, Porter (1980) introduced a typology of strategies, which show how business companies try to gain competitive advantage over their competitors – the so-called "generic strategies." As noted by Rothaermel (2017, p. 178), those strategies are considered as "generic" since "they can be used by any organization – manufacturing or service, large or small, for-profit or nonprofit, public or private, domestic or foreign – in the quest for competitive advantage, independent of industry context." It is generally composed of three



Source: Collected by the authors from official websites of Snapp and Tap30

Figure 2.
The development speed of Snapp and Tap30 in the local markets

sections: the differentiation strategy: it attempts to create value for customers in a higher rate than its competitors, by delivering services or products in such a way that they include unique features while their costs are remained at the same levels; the cost-leadership strategy: it seeks, despite of differentiation strategy, to create value for customers at the same level, while it continuously is trying to present products or service by lower prices in comparison to its competitors; and the focus strategy: it specifically pursues a narrow section of the market for delivering value by differentiation or cost-leadership strategies. It would be worth while that generic framework implies "different organizational arrangements, control procedures, and incentive systems. Larger firms with greater access to resources typically compete on a cost leadership or differentiation basis, whereas smaller firms often compete on a focus basis" (David and David, 2017, p. 134).

Kunc (2018) explained how organizations could reach out to competitive advantage by using generic strategies. In doing so, companies first implement efficiencies in their production cycle, thereby enabling them to keep their costs down. By doing so, they will enjoy a cost advantage over their rivals. It is then possible for them to deliver products or services at a lower price. On the other hand, there is a route to competitive advantage by specific designs based on customers' needs. In this way, organizations can deliver unique products and services. which would provide them with differentiation advantage. This strategy involves more challenges for business managers since "it is easy enough to grasp that a successful differentiation strategy must offer value in ways unmatched by rivals, a big issue in crafting a differentiation strategy is deciding what is valuable to customers" (Gamble *et al.*, 2013). More clearly, the competitive advantage paths based on the generic strategies are shown in Figure 3.

Considering the nature of e-businesses, Kim *et al.* (2004) stated that the "focus" part of generic strategies is considered as a vital element of every business in digital platforms. It, thus, does not act as a strategy option, but an essential requirement in every digital business. As Rashidirad *et al.* (2013) noted, regardless of cost-leadership, one might consider that the two most important parts in differentiation include "product-service" and "marketing" ones, as such, it gives us a comprehensive framework for analyzing competitive strategies in digital platforms. As used in this paper, Figure 4 illustrates definition of each strategy exactly.

4. Method

Due to the in-depth nature of competitive strategies in ridesharing platforms, the present study employs a comparative case study to understand the dynamics of such businesses in terms of developing mobile applications. Comparative studies require the ability to investigate, compare and contrast concepts or real cases, as it aims to indicate how two research cases are similar or how they are different (Bartlett and Vavrus, 2017). By comparatively investigating competitive strategies of two Iranian mobile apps in ridesharing business, it is possible to obtain a rich knowledge about commonalities and competitive advantages of each of them succeed. It should be noted that "case study research involves the study of an issue explored through one or more cases within a bounded system" (Creswell, 2007). According to Eisenhardt (1989), case study can contribute to the process of theory building by a throughout analyzing of the related cases. Cross-case replication also serves to reinforce, extend and clarify the resulting theory (Eisenhardt, 1989). A case study employs replication philosophy, and the cases are determined using theoretical rather than statistical sampling (Yin, 2009).

Alongside participative observation of the researchers in this study, the main process of data collection is based on the secondary data approach. As Johnston (2017, p. 619) pointed out, "secondary data analysis is analysis of data that was collected by someone else for another primary purpose. The utilization of this existing data provides a viable option for researchers who may have limited time and resources." In doing so, data are collected from 38 credential websites, both national and international databases, and described in Table II. These websites are considered as a fruitful source of information about the dynamics and

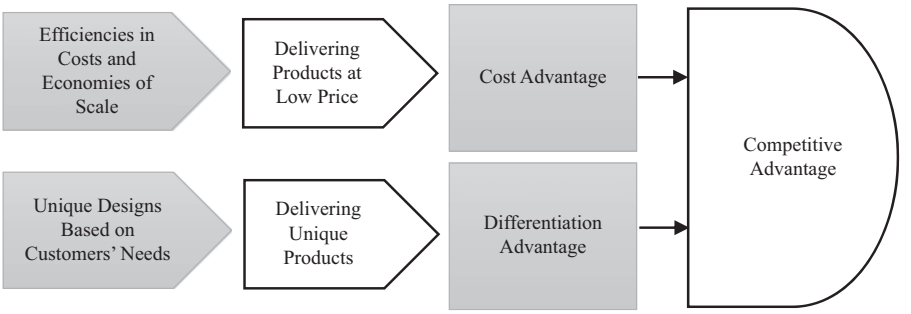


Figure 3.
Competitive advantage paths based on the generic strategies

Source: Based on Kunc (2018)

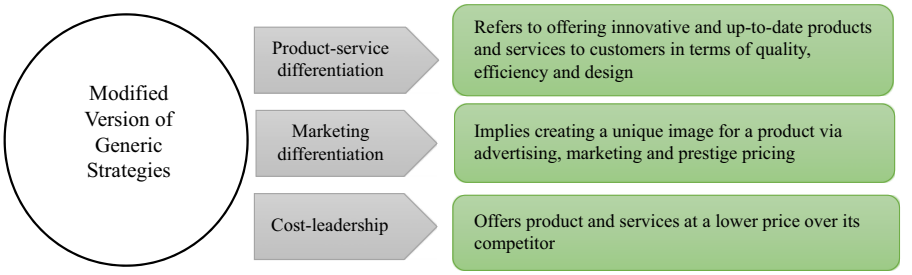


Figure 4.
The modified version of generic strategies

Source: Based on Rashidirad *et al.* (2013)

No.	Website address	Main domain	Language	No.	Website address	Main domain	Language
1	way2pay.ir	Fintech	Persian/ English	21	www.shara.ir	News	Persian
2	www.tabnak.ir	news	Persian	22	www.asrekhodro.com	News	Persian/ English
3	www.reuters.com	News	English	23	www.mehrnews.com	News	Persian/ English
4	www.theguardian.com	News	English	24	www.shabta.com	e-learning	Persian
5	www.aljazeera.com	News	English	25	emavara.com	Branding	Persian
6	ecomotive.ir	Start-up news	Persian	26	financialtribune.com	Economic news paper	English
7	virgool.io	Blogging	Persian	27	armaneghtesadi.com	News	Persian/ English
8	digiato.com	Tech news	Persian	28	www.crunchbase.com	News	English
9	www.ilna.ir	News	Persian/ English	29	www.tasnimnews.com	News	Persian/ English
10	modireweb.com	Marketing	Persian	30	click.ir	Tech news	Persian
11	itneeds.ir	Tech news	Persian	31	techrato.com	Tech news	Persian
12	bonrailco.ir	Train ticket	Persian/ English	32	iranparadisetours.com	Travel agency	English
13	snapp.ir	Snapp's official website	Persian	33	tap30.ir	Tap30's official website	Persian
14	www.magiran.com	Journal aggregator	Persian	34	behave.ir	Economic school	Persian/ English
15	khabaronline.ir	News	Persian/ English	35	dariconline.ir	News	Persian/ English
16	www.isna.ir	News	Persian/ English	36	www.imna.ir	News	Persian/ English
17	shanbepress.com	Start-up news	Persian	37	www.irstartup.com	Sturt-up news	Persian
18	www.farsnews.com	News	Persian/ English	38	shanbemag.com	Journal	Persian/ English
19	donya-e-eqtesad.com	News	Persian				
20	fararu.com	News	Persian				

Table II.
The list of study's data sources

performance of ridesharing platforms in Iran. As shown in Table II, these data sources include a vast variety of information and documents related to official, private, news and other organizations. After collecting data, the analyzing process was conducted according to the study's theoretical framework (i.e. the modified version of generic strategies). In other words, extracted strategies from the databases are thematically divided based on the constructive parts of the generic framework. The thematic analysis is based on the principles introduced by Braun and Clarke (2006).

5. Findings

As mentioned earlier, the present study has focused on the two dominant mobile apps among the Iranian online taxi services market, which are Snapp and Tap30. This research seeks to analyze their competitive strategies and contribute to the emerging literature regarding ridesharing platforms in Iran. As such, the paper's findings are presented separately for each app by focusing on the modified version of the generic framework. In doing so, at the first stage, some information about their history will be provided, and then, critical debates concerning their competitive strategies will be explained.

5.1 Snapp

5.1.1 Background of the application. Snapp as an online taxi service was born in 2014 under the brand of Taxiyab. However, it did not harvest an impressive success in the Iranian digital market at that moment. One year after, it restarted its activities in this market by rebranding itself under the name of Snapp. According to the Snapp's CEO at that time, Shahram Shahkar the reason for this rebranding was that they wanted to enter other Iranian markets such as food, travel, entertainment, etc. As a significant point in the history of Snapp, it should be noted that Mobile Telephone Networks invested $20m on this digital app and paved the way for its growth and development. At the beginning of the business, as Shahkar stated, the development of the app was outsourced, but now the application is being developed by the company itself. Snapp currently offers four services through their application:

(1) Snapp Eco: the most budget friendly transport service of the app.

(2) Snapp Rose: services for women and children with women drivers.

(3) Snapp Bike: service provided to transfer individuals by bike.

(4) Snapp Box: a service to send deliveries by motorcycle.

Snapp had worked without a strong competition in Tehran before the arrival of its main rival, Tap30. However, despite of its arrival, after two years of activity, Snapp had achieved an overall development of its app as well as its services. By far, Snapp is currently operating in more than 80 big and small cities in Iran. At first, Snapp established a 13 percent commission for its drivers, but after increasing its popularity, the figure has reached 20 percent. According to their official website, Snapp has over 700,000 drivers, and out of these, 400,000 drivers work full-time for this application. The current number of employees exceeds 1,000 and the amount of trips per day is about 1.2m.

5.1.2 Campaign strategies. To introduce the app to its users and increase its reputation, Snapp has focused on creating collaborative campaigns with companies and popular websites. By 2018, more than 25 successful campaigns had been completed by Snapp. In this regard, the first Snapp popular campaign was in June 2016 with the Bamilo website (an online retailer). Bamilo customers were offered a discount code for using Snapp. In another campaigning strategy, Snapp collaborated with Shams factory, a famous brand of non-alcoholic drinks. In this case, Snapp passengers were given a cool drink with the Shams logo, and the passengers were asked to take selfies with Shams drinks and the Snapp cars and upload it to Instagram. By uploading these photos, they significantly increased their reputation. After these two successful campaigns, Snapp also sponsored another campaign with Bonrailco, a train ticket sale website. Passengers who used this website were benefitted with a discount of Snapp. There are several other examples of campaigning strategies in other market segments(e.g. Samsung, art festivals, publishing companies, etc.) for this digital company. To sum up, the campaigns are designed to promote the app and catch new users, as well as to boost its reputation on social media.

5.1.3 Local development. To promote its business in the new cities, Snapp provided significant discounts for its users. It also provided great privileges (e.g. a free journey) for those who had taken effective actions to promote this app. The digital company has announced one of its success stories: that it has been able to offer its services at a 30–40 percent lower price than the traditional taxi market.

5.1.4 Social engagement. The engagement of users is one of the essential ways in which the company has tried to make its app more attractive to the potential fans. For example, Snapp has created an entertaining app, SnappQ, that every night, live and online through Instagram, creates an interactive contest among thousands of interested people and ultimately gives prizes to the winners.

As part of the role of social responsibility, Snapp partnered with the Association of Disabled Persons in Iran. More Specifically, this digital firm employed more than 2,000 disabled people as Snapp's drivers, while Snapp does not receive any commission from them. Such action led the social institutions to pay more attention to the company and praise it.

In 2018, Snapp designed a new strategy to introduce its app. Travelers could reach their destination by chance in a car driven by their favorite actor or singer. In addition, the passenger can win a 12-htrip by which he or she can visit interesting places and enjoy experiences, such as helicopter trips.

5.1.5 Media advertisement. It is noteworthy that the advertising of these companies was prohibited between 2014 and 2016 in the form of billboards in Iranian cities as well as in mass media. According to Shahram Shahkar, CEO of Snapp, the company has dealt with this challenge by using word-of-mouth marketing, offering different incentives and rewards. Snapp has used street marketing to invite new drivers to its platform. In this way, by setting up small bases in the streets, interested drivers were immediately enrolled.

According to Cafebazaar, a famous digital app store in Iran, at the beginning of Snapp's entry to the market it attracted 200,000 passengers and reached a monthly increase of 100 percent in Snapp applications downloads through this kind of marketing strategy. According to Rashashid Maher, Senior Marketing Manager of Snapp, they also used television commercials during a live broadcast of the football League of England to advertise extensively the application. While Iranian people were watching this competition on TV, this digital firm could promote its application in the Iranian media market. Furthermore, the app has also been able to gain relevance along Iranian mass media by the sponsorship of one of the country's most famous domestic football teams, Sepahan team. It is evident that Snapp is keen on creating a constant interaction with its users. To this end, it has used various strategies such as communication marketing, mobile message marketing, influencer marketing, experiential marketing, etc.

In the latest version of the Snapp app, the scoring feature has changed in this application, and passengers can better figure out the strengths and weaknesses of their trip and drivers. There is also no need to type their own opinion, and moreover, the need for direct contact with the support team has decreased dramatically. In other words, using the unique features of this application (e.g. professional routing, respectful behavior, safe driving, timeliness, elegant appearance, cheerfulness, a clean and present car and enjoyable music) travelers could give their opinion about the trip by the default options, which are provided by the app.

5.1.6 Service development. In the new version of the app, information such as distance to destination and type of location has been added to the search, and users can also find different options by searching by words. Online payment has been simplified, and when the user registers their travel request, the alert message is sent promptly to nearby drivers so they can serve passengers quicker. In the new version, it is also possible to archive 'favorite locations' that are most used by the passenger. Other Snapp services like "Snap Eco," "Snap Rose," "Snap Bike" and "Snap Box" can be selected through the same app. In order to increase passenger safety, the Snapp app provides passenger with their travel data (driver name, start time, car number, vehicle model, destination address and exact current location) when they start their journey, so that they can share it with their contacts. There is also an option named "anonymous call" that allows the passengers to hide their mobile phone number from drivers. In addition, in terms of graphic design, the app continually improves itself and tries to increase the attractiveness of its appearance.

In the Snapp app, the algorithm calculates the fixed price and the fares do not change during the trip. After sanctions against Iran and removing the Snapp application by Google Play and Apple Store, Snapp introduced its web-based version to its users. In this way,

individuals can use the services of this digital company without using the mobile app, and only through the website. Snapp has also created a dedicated panel for organizations in Iran, which allows companies to order as much cars as they need. This application has already tested the "Snapp Super Application" in July 2018, and the findings show that it seeks to use this version to aggregate multiple services in just one application.

5.2 Tap30

5.2.1 Background of the application. Tap30 was officially launched in 2016 in Tehran. This app has been able to attract the attention of many users, and for this reason it is considered one of the main competitors of Snapp. In 2017, one of the Iran's largest banks, Melli bank, invested $20m in Tap30. This application is mainly presenting two services in the Iranian digital market:

(1) Tap30 Classic: economic taxi providing.

(2) Tap30 Line: sharing car between people with similar destinations.

This digital firm takes a 15 percent commission from its drivers. According to the CEO, Tap30 has over 250,000 drivers, and out of these, 150,000 drivers work full-time for this application. The current number of employees exceeds 800 people and the number of trips per day is about 450,000. Tap30 Line service has unique features which could not be imitated by other competitors like Snapp (by the moment). This service allows the driver to pick up two passengers with a similar origin and destination during a trip, which reduces costs by 30 percent for passengers and increases 40 percent in revenue for drivers. As the marketing manager of Tap30 Amir Pasha noted, due to the complexity of this technology, the Tap30 Line service could be considered as a significant source of their prosperity. Tap30 has given its drivers permission to install their competitor's Snapp application and simultaneously operate for two companies. However, Snapp has opposed this process and did not allow its drivers to work for Snapp and Tap30 simultaneously. Due to this, Tap30 complained about Snapp because of the monopolization of the online taxi market, and eventually, the competition council in Iran issued a final vote in favor of Snapp.

5.2.2 Campaign strategies. To introduce its application to potential users, Tap30 has focused on creating joint campaigns with companies and popular websites. By 2018, this digital firm had been able to launch more than 15 successful campaigns. Tap30 launched its first campaign in a way that attracted the attention of "drivers" rather than focusing on the passenger's attention. To this end, the company held "five-minute rest" campaign to honor its drivers for their hard working. Moreover, to create a happy and sincere atmosphere with drivers' children, Tap30 also launched another campaign to support drivers and their families at the start of the school year. In another joint campaign, the company has partnered with several famous cafes in Tehran to provide free breakfast for passengers. Furthermore, in a joint project with the Iranian Automobile Federation, Tap30 organized a BMW cars Festival. In doing so, the cars driven were printed with the Tap30's logo in Tehran. As a matter of fact, this digital firm tried to introduce itself to various people in Iran by holding such a creative campaign. There are a number of other activities in the Tap30's experiences. In this regard, various partnerships, including collaboration with the Cinema ticket (an online cinema ticket selling), recreational centers, Asiatech (an internet provider in Iran), Chilivery (an online food service), Digikala (the biggest online retailer in Iran), Beeptunes (a music download store in Iran) and Rahoja (an online service for hotel reservation and airplane) can be mentioned, amongst many others.

5.2.3 Local development. Eight months after Tap30's initiation, it started to grow geographically. Tap30 is currently operating in more than 15 major cities in Iran.

To contribute to the geographical development of this business, Tap30 tried to attract, in each new city, the attention of potential travelers with free services in its first days of activity. In addition, users who introduced the app to their friends could take advantage of a free trip. The digital firm also introduced a "Free Fridays" plan to attract travelers from different cities.

5.2.4 Social engagement. To engage more audience, this digital firm has also launched contests on its social media pages. For example, they have held several photography competitions on its Instagram page. In addition, the company has created other competitions for predicting football results. To introduce its new services (e.g. Tap30 Line) to the users, moreover, this digital firm has used the influencer marketing to a large extent in social media.

5.2.5 Media advertisement. When Tap30 officially began its activity in Iran, it had no problem with the prohibition of environmental advertising. For this reason, the company has widely been advertised in the various cities by many billboards. Tap30 has used street marketing to encourage new drivers to join its platform. In this way, by establishing small stands in the streets, interested drivers were immediately registered. To further promote the app, the company has been trying to attract more potential users by providing 30 percent discount codes for students, seasonally or weekly, to visit art centers and museums.

Video marketing is another strategy in Tap30, in the way that the firm has widely used this strategy in social media for promoting itself. It is noteworthy that within a year, the company was able to offer many attractive video products in cooperation with professional producers. In addition, through face-to-face marketing, Tap30 has tried to make people experience working with this app, as well as let them ask questions to marketers about it. The company has also tried to improve its customers' feelings about it by employing interactive advertising. In this regard, Tap30 put a gaming machine in the big malls and allowed people to play with it. The aim of the game was to collect the Tap30 coins.

5.2.6 Service development. The company has paid attention to its application's design and its development as well, to provide a better user experience. Through smart technologies, Tap30 app can detect approximately the time it will take for the passenger request to be attended, which is then automatically communicated to the person, who can accept it or reject it. Among the smart services belonging to Tap30, favorite suggestion, origin suggestion, destination suggestion, ride suggestion and pick up suggestion, can be mentioned, amongst others. These features are developed in Tap30 application based on person's use from the app.

The search engine of this app is beneficial in finding the address for its passengers. In other words, users can easily choose their exact destination through this feature. By typing a part of the address, the user can locate his/her destination accurately on the map. Also, the user has the option to choose an unlimited number of different destinations for his/her trip and pay less than the traditional taxi in the Iranian market.

Concerning providing security to travelers, it is possible for passengers to communicate with the driver through the anonymous call service. In 2018, this app has provided users with a journey information sharing service. By using this service, passengers can share a link containing their travel information (driver name, start time, car number, vehicle model, destination address and exact current location) to one or more of their friends. One of the new features of the Tap30 app is an emergency call, namely SOS, through which the passenger can communicate with security units and travel support with the least effort. It should be noted that when the drivers deviate from their main route, the app automatically informs the support units.

This app separately provides specialized services for organizations and companies. In this way, organizations can create an account at the Tap30's website, requesting as many vehicles as they need. Moreover, Tap30 does not depend solely on internet technology in its services. By assigning a phone number, this firm has made it possible for anyone, if necessary, to make a car request just by telephone. Like Snapp, this company also designed its web-based version for its users in response to the sanctions imposed by Google Play and Apple store against Iran. The set of features of each of these two applications is presented in Table III.

In the previous sections, it has been tried to describe the various services and activities of each of these two digital companies. Taking into account the framework of the modified version competitive strategies, as presented in the section of theoretical framework, Table IV shows what are the main strategies according to the theoretical framework.

6. Discussion

This study explores the competitive strategies of the most popular mobile applications in the Iranian online taxi services, Snapp and Tap30. In doing so, for organizing data extracted from the databases, the study has benefited from the modified version of the generic strategies (Rashidirad *et al.*, 2013).

The importance of online taxi services manifests itself in their "facilitator" role they play in the digital market. In other words, these apps could act as a bridge between passengers and drivers efficiently and effectively. One might conclude that such apps could contribute to making an efficient digital market (Khajeheian, 2013; Khajeheian and Tadayoni, 2016; Khajeheian and Friedrichsen, 2017). More specifically, as these apps can better recognize the needs of drivers and passengers and find the right responses for them, the digital market will move more efficiently. In general, taxi apps can be considered as a fruitful source for making money in emerging markets (Chan *et al.*, 2016).

Regarding strategies in marketing differentiation, although both digital companies have implemented similar strategies, Snapp tries to have gained more reputation in the country. The reason can be found in two facts: first, Snapp did not have any competitor in its first two years of activity, and it built up an online taxi culture in Iran by itself. Therefore, the brand of Snapp has a special place in the minds of the Iranian people. Second, this company's marketing strategies have paid more attention to social events and celebrities, which has made it more popular in social media. Despite Snapp, Tap30 has dedicated its attention to drivers, thereby making it possible to attract more of them. Although this digital company has pursued similar strategies toSnapp, it has not been able to implement marketing strategies in Iran properly. One primary reason for it is that the company has focused more on other sectors (e.g. service differentiation). Moreover, due to its rapid development in local markets, Tap30 may not be able to effectively and adequately understand the marketing strategies specifically for each city.

The variety of services in Snapp is higher than that of Tap30 application. In other words, this digital firm (i.e. Snapp) has tried to consider the different needs of users and integrate various services into one application (like Snapp Eco, Snapp Box, Snapp Bike, etc). On the other hand, Tap30 has focused solely on the transportation of passengers by car, and there are no services such as sending a mailbox or traveling by motorcycle in this app. The findings show that this app does not seek to aggregate services; instead, by focusing on its core service, the app tries to make a significant differentiation in comparison to its competitors. In this regard, by launching a new service, namely Tap30 Line (for sharing journeys between two passengers), this app introduces a new service which makes it possible for passengers to request a journey with a lower price. This new service has led to the introduction of the service by travelers to their friends and

Features	Snapp	Tap30
Service Type	Snapp Eco, Snapp Rose, Snapp Bike, Snapp Box	Tap30 Classic, Tap30 Line
Variety of Service choice (car)	Snapp Eco, Snapp Rose	Tap30 Classic, Tap30 line
Variety of Service Selection (Motorcycle)	Snapp Bike, Snapp Box	Not available
Payment method	Cash, credit card, online Payment	Cash, credit card, online payment
Credit enhancement method	Credit card (online)	Credit card (online)
User Profile	Name, phone number, e-mail address, gender, birth date	Name, phone number, e-mail (optional)
Transactions	Available	Available
Rides History	Available	Available
Favorite Locations	Available	Available (more intelligent)
App Messages	Available	Not available
Help and Support	Phone calling, messages, send trouble Options	Phone calling
Settings	Show map, language (Persian, English, French), receive newsletter, receive ride emails, receive ride SMS, receive ride transaction SMS	Show traffic, anonymous call, Language (Persian, English, Turkish)
Security	Anonymous call (available in a limited number of cities)	Anonymous call, emergency security call (SOS), sharing ride information, alarm for deviation from route
Referral(Introduce App to friends)	Send link (easier)	Send code
Trip Feedback	Available (more optimized process)	Available
Set Destination	(First destination), (Second destination), (Round-Trip), (Extra Stop)	(First, second, third, etc. destination)-(Extra stop)
Show Available Drivers in Map	Available	Available
Gift Code/Discount Code	Applicable after requesting a trip	Applicable before travel request
Search engine for the origin and destination	Available (less optimized)	Available (very accurate and unique)
User Interface/Experience	Less optimized	More optimized
Graphic Design	Colorful	Black and white
App's stability	Available	Available (More stable)
App Intelligence	Not available	Favorite suggestion, origin suggestion, destination suggestion, ride suggestion, pickup suggestion, share ride reminder, deviation from rout
Pricing	Fixed duration trip	Fixed duration trip

Table III. Comparison of app features in Snapp and Tap30

encouraged them to use it. In other words, through initiating such service, Tap30 has packaged three competitive strategies (i.e. marketing differentiation, service differentiation and cost-leadership). Focusing its critical function, such strategies can be named as "Hybrid Competitive Strategies" (Bambang Baroto *et al.*, 2012).

Engaging the user in an app is one of the essential strategies that can increase the use of application among users. In this regard, by providing various features in the application, Snapp has tried to attract the user's attention to its application. In contrast, Tap30 has not paid attention to such issues in its app design. However, given the specific cultural conditions in Iran and

	Snapp	Tap30
Marketing differentiation	Holding various campaign (more focused on passengers) Holding creative contests among users (e.g. SnappQ) Collaboration with celebrities and influencer marketing Sponsorship for a popular football team Mobile marketing (message)	Holding various campaign (more focused on drivers) Holding creative contests among users (e.g. photography competition in Instagram) Influencer marketing Interactive advertising (e.g. gaming in malls)
Product/service differentiation	Service diversification (Snapp Rose, Snapp Eco, Snapp Bike, Snapp Box) Paying special attention to vulnerable people (e.g. disabled individuals) Web-based version	Web-based version Providing service by telephone (without app) Trip sharing service (Tap30 Line) Using intelligence technologies in the app
Cost leadership	Less price in comparison to traditional taxi service	Less price in comparison to traditional taxi service and Snapp Free trip plans (e.g. free Fridays plan)

Table IV.
Specific competitive strategies of applications of snapp and Tap30

religious issues (especially for women), both the applications have tried to provide various options for security and privacy issues (Rogers, 2015).

Paying attention to some vulnerable groups of society (e.g. people with disabilities), Snapp has made company's positive reputation in the public mind. The role of social responsibility was one of the things neglected by the rival firm. However, none of these apps has made it possible for people with visual impairments to request a trip through these apps. To provide support services, Snapp has implemented a variety of options (e.g. phone calling, message, send trouble options) for passengers, which will make the traveler more comfortable with this app for his/her trips. This is while the company has only provided a phone call for its passengers. With an emphasis on support issues, these apps can well show how much value and respect they have for their travelers.

7. Conclusions

Although Snapp has made significant efforts to provide various services to passengers, the present study shows that it has not been able to do it intelligently, as it has failed to identify customers' new needs. In addition, Snapp is trying to keep its position in the Iranian market by monopolizing it. On the contrary, Tap30 has paid attention to the intelligence of services in order to explore and exploit new opportunities, so that it can be distinguished from its rival and gain competitive advantage. The proper and timely use of artificial intelligence by these apps will be a major issue that will greatly determine their future success on the market, according to the conclusion of this work.

Like other qualitative researches, this study also has limitations in generalizing findings to other communities. For this purpose, it is recommended that the results of this study be generalized more cautiously. Moreover, access to some data in the digital market of Iran was one of the significant issues that researchers faced with. However, using a large number of different databases, attempts were made to reduce such limitations.

The present research also has some significant implications for policymakers in the emerging markets. In this regard, policymakers would provide a "free-friction" context for these businesses by eliminating the problematic obstacles – e.g., permission barriers for developing the application development inside the country. Furthermore, dedicating an exclusive space for promoting these businesses by broadcasting channels can be used as a supportive strategy hired through policymakers bodies.

Taken all, the user experience in using the taxi apps is one of the most critical issues that affect the flourishing of these applications in emerging markets. However, so far in a country like Iran, there has not been a study to elaborate and explain these experiences deeply. Therefore, future researchers are advised to fill this gap through more qualitative studies. Applying the competitive strategies introduced in the present research, platform managers would be benefited from using the insights provided here. In particular, they should understand the fact that competitive advantages are deeply tied to a combination of product/service differentiation, costs leadership and marketing strategies rather than focusing on just one dimension.

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