

*Smart Transportation Applications and Social Change
in Algeria: Reshaping Social Relationships through the
"Yassir" Application*

تطبيقات النقل الذكية والتغيير الاجتماعي في الجزائر إعادة
تشكيل العلاقات الاجتماعية من خلال تطبيق "ياسير"

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Abstract:

Algeria is experiencing a notable transformation in its social fabric and human interactions due to the widespread use of smart transportation applications like "Yassir." These applications raise crucial questions about their impact on social and economic relationships within the country. Do they reinforce "individualism" at the expense of traditional "solidarity" by altering mobility patterns and interpersonal interactions? How do they affect labor relations in the transportation sector, potentially generating new forms of "independence" alongside potential "dependency"? Furthermore, the research explores how these applications reshape the concept of "public space" and its capacity to foster spontaneous encounters among diverse segments of society.

study also examines the impact of these applications on the redefinition of "trust" in daily transactions, r These inquiries form the basis for a profound analysis aimed at understanding the intricate effects of smart transportation applications on Algerian society and its future trajectory.

Key words: Smart transportation applications, Yassir, Social relations.

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الملخص:

تشهد الجزائر تحولا ملحوظا في نسيجها الاجتماعي وتفاعلاتها البشرية بسبب الاستخدام الواسع النطاق لتطبيقات النقل الذكية مثل "ياسر". تثير هذه التطبيقات أسئلة حاسمة حول تأثيرها على العلاقات الاجتماعية والاقتصادية داخل البلاد. هل يعززون "الفردية" على حساب "التضامن" التقليدي من خلال تغيير أنماط التنقل والتفاعلات الشخصية؟ كيف تؤثر على علاقات العمل في قطاع النقل، يحتمل أن تولد أشكالاً جديدة من "الاستقلال" إلى جانب "التبعية" المحتملة؟ علاوة على ذلك، يستكشف البحث كيف تعيد هذه التطبيقات تشكيل مفهوم "الفضاء العام" وقدرته على تعزيز اللقاءات التلقائية بين مختلف شرائح المجتمع. كما تبحث الدراسة تأثير هذه التطبيقات على إعادة تعريف "الثقة" في المعاملات اليومية، وتشكل هذه الاستفسارات الأساس لتحليل عميق يهدف إلى فهم الآثار المعقدة لتطبيقات النقل الذكية على المجتمع الجزائري ومساره المستقبلي.

الكلمات المفتاحية: تطبيقات النقل الذكية، ياسر، العلاقات الاجتماعية.

Introduction

Smart transportation applications like "Yassir" have revolutionized mobility patterns in Algiers, marking a shift from traditional taxis to a more technology-driven approach. This shift reflects the complex interplay between technology and social change. The widespread adoption of these applications promotes an increasing reliance on digital technology as a primary means of fulfilling daily needs, including transportation. This phenomenon signifies a digital transformation with profound implications for individual behaviors. The impact of these applications extends beyond mere time and effort savings through convenient ride-hailing services; they are reshaping the relationship between citizens and their urban environment. For instance, these applications foster individual mobility, enabling individuals to travel independently, thus reducing reliance on public or shared transportation.

Furthermore, they have disrupted the dynamics of the transportation sector, leading to a decline in the popularity of traditional taxis in favor of applications offering more transparent evaluation mechanisms. Additionally, these applications have impacted the notion of public safety, especially during late hours, by providing a safer and more reliable mode of transportation for diverse demographics, including women. This raises discussions about the role of technology in reshaping gender relations and promoting social empowerment.

The concept of social change is central to sociological inquiry, and it has garnered significant attention from prominent scholars like Ibn Khaldun, Auguste Comte, and Émile Durkheim. Their diverse theories and approaches seek to understand the transformations affecting social structures and ways of life. While change has been an inherent characteristic of human existence throughout history, the digital age represents a pivotal turning point in the speed and depth of the changes we witness today. The transportation sector is a prime example of this intricate interplay between technology and social change, particularly with the emergence of smart transportation applications that have reshaped mobility experiences worldwide. Algeria is one arena where this transformation is prominently manifested through pioneering applications like "Yassir." The widespread adoption of these applications has led to a radical shift in mobility patterns in Algiers, reflecting the complex interaction between technology and social change. Their proliferation reinforces the increasing reliance on digital technology as a primary means of meeting daily needs, including transportation, signifying a digital transformation with profound implications for individual behaviors.

Concerning social relationships, "Yassir" has contributed to reshaping these relationships in various ways. It has fostered "individualism" in mobility, restructured the dynamics of relationships within the transportation sector, and influenced the concept of "public safety," particularly for women. This opens the door for discussions about the role of technology in reshaping gender relations and promoting social empowerment.

Hence, we pose the following question: How have smart transportation applications impacted and reshaped the concept of social relationships in Algeria?

Defining Concepts:

1. Smart Transportation Applications:

Smart transportation applications are a prominent manifestation of the evolution of "Intelligent Transportation Systems" (ITS), which employ information and communication technologies to enhance the efficiency and safety of the transportation sector. To understand the concept of "smart transportation applications" more precisely, we can

refer to some previous definitions of "ITS" that outline the general framework for these applications.

In the study "The Contribution of Intelligent Transportation Systems to Reducing Environmental Pollution," Samia Lahoul and her colleagues define ITS as **(samia.2014.41)** "the use of computer, electronics, information and communication technologies in the field of transportation." Smart transportation applications can be considered a practical embodiment of this definition, as they rely on smartphones and internet networks to provide advanced transportation services. In her study on the same topic, Ibtissam Boulgouas emphasizes the importance of obtaining comprehensive information about the performance of transportation facilities and environmental conditions to "improve levels of safety, productivity, and overall movement.**(ibtisam.2014.158)**" Smart transportation applications contribute to achieving these goals by providing accurate and up-to-date data on traffic flow, vehicle routes, and estimated arrival times.

The "Local Authority Guide to Emerging Transport Technology" published by the "Institution of Engineering and Technology (IET) and ITS" **(ITS.2014.40)** in the United Kingdom defines ITS as the use of information and communication technologies to "provide information on the performance of transport facilities and travel efficiency," pointing to examples such as smart highways, autonomous control, traffic management, and safety and security enhancements. Applications like "Uber" and "Yassir" are clear examples of how these technologies are employed to improve the mobility experience and make it more efficient and safe.

Based on these definitions, we can say that "smart transportation applications" are programs used on smartphones that rely on information and communication technologies and location tracking to provide advanced transportation services. They contribute to improving the efficiency, safety, and sustainability of the transportation sector by effectively connecting drivers with passengers and providing accurate and up-to-date information on traffic flow, vehicle routes, and estimated arrival times.

2. Yassir Transportation Company and Application:

Yassir is considered one of the successful startup companies, its beginnings date back to January 2017. Its trial version for the Yassir transportation application was introduced in July 2017, followed by the

commercial version in 2017, which was named Yassir. Initially, its activity focused on providing an innovative transportation service that could be used via smartphones anywhere and anytime, allowing everyone to book a driver and move safely, with its mission to make people's lives easier.(<https://yassir.com>)

Yassir provides an innovative transportation service that can be used via smartphones, anywhere and anytime, and is considered a role model in the field of startups in Algeria, especially in the technological field, due to its continuous growth, focusing on several principles, including:([amarouche.2022.91](#))

- a. The service is always available: Anytime and anywhere covered by the company.
- b. Providing the best price: Taking into account traffic density, service quality, distance, and travel time.
- c. Providing quality service: This is done by reducing waiting time for both the customer and the driver, providing safe service, and improving communication between the driver and the customer.
- d. Ease of use: The application can be used easily.

Yassir is a private Algerian startup company established in 2017([wissam.2023](#)). Yassir is a mobile application that allows you to request or book a taxi via your smartphone. This service is simple, fast, and safe.(<https://yassir.com/ar/faq>)

Its definition on its official website is as follows: In 2017 in Palo Alto, Nouredine Tayebi exceeded his imagination and came up with a new idea to facilitate the transportation process for every Algerian. Hence, the idea of "Yassir" was born, the first passenger transportation service in Algeria.

Yassir is present in eight countries (Algeria, Germany, Canada, Ivory Coast, France, Morocco, Senegal, Tunisia) and 45 cities, with more than 5 million users([Célia.2023](#))

First launch: In 2019, Yassir managed to raise \$13 million from an initial investment round, which allowed it to launch e-commerce and delivery services.

Enhancement stage: In 2021, Yassir gained the attention of the world's largest startup incubator: YCombinator and received prestigious funding of \$30 million from the United States, which greatly enhanced its expansion plan.

The leap: In 2022, Yassir received an investment of \$150 million from the second round of funding, five times what was raised in its previous round from global investors such as BOND and Y Combinator. At the same time, the company opened a technology center in Europe, where it began attracting and searching for experienced and skilled individuals to join the center and participate in this expansion.

Growth stage: Over the past years, Yassir has attracted more than 6 million users and 130,000 partners spread across 45 different cities in Algeria, Morocco, Tunisia, South Africa, Senegal, Canada, and France. In addition to more than 450 employees around the world from more than 15 nationalities.(<https://yassir.com/ar/about-us>)

"Yassir" and Reshaping Social Relations in Algiers: Towards Understanding the Impacts of Smart Transportation Applications in Algerian Society:

Recent years have witnessed a widespread adoption of smart transportation applications like "Yassir" in Algeria, leading to tangible transformations in mobility patterns and social relationships. The impact of these applications extends beyond merely facilitating movement and saving time; it encompasses the very fabric of social interaction and the ways in which relationships are constructed between individuals. These transformations can be analyzed through several key themes:

1. Promoting Individualism and Mobility Independence:

The spread of smart transportation applications aligns with a general trend toward "increasing individualism" in modern societies, a trend highlighted by the works of classical sociologists like Émile Durkheim, who linked modernization to the decline in the importance of organic solidarity based on similarity and social proximity, and the rise of "mechanical solidarity" based on specialization and individualism. According to Durkheim, the form of social bonds can explain the social system as a whole. They allow us to bring individuals together and connect the individual to the group. He identified forms of social solidarity based on a morphological study that allows him to determine the form of solidarity, and a physiological study that determines the laws governing the functioning of solidarity. He concluded that there are two basic models of social solidarity, each associated with a particular society. Mechanical solidarity prevails in traditional societies, where a strong collective feeling prevails in society, and individuals are similar

in their functions and perceptions. Therefore, the functioning of mechanical solidarity is according to the principle of similarity and social homogeneity, as they are less different and have the same feelings, beliefs, customs, and opinions.(**tabal.2012.121**)

Organic solidarity, on the other hand, is associated with modern societies. As a result of the division of labor, a great difference occurs in experiences and functions, so the existence of the individual becomes necessary for the whole, so its functioning is based on difference. Therefore, individuals are not similar, but they are aware of their role in ensuring the proper functioning of the whole. This is the ideal model to explain the social change that has occurred in Algerian society and its social bonds. In the Algerian context, it is noticeable how these smart applications have allowed individuals, especially in major cities, to move more independently without having to rely on traditional social networks like family or neighbors. Individuals no longer need to seek assistance from others to reach their destinations, which reduces opportunities for traditional social interaction and enhances "functional independence" for individuals. This shift raises questions about its impact on the cohesion of the social fabric and the importance of primary relationships in the Algerian context in the long run. This social transformation has led to an increased sense of independence but at the same time, it may have diminished some forms of social solidarity and cooperation that were part of traditional Algerian culture.

2. Reshaping Professional Relationships in the Transportation Sector:

Smart transportation applications have introduced the dynamics of the "sharing economy" to the transportation sector in Algeria. Drivers are no longer just "taxi drivers" but have become "independent contractors" managing their own work through a digital platform. In this context, the relationship between the driver and the passenger becomes more "contractual," governed by service quality standards and mutual evaluations rather than personal relationships. This shift can be linked to the concept of the "new social contract" proposed by sociologist Anthony Giddens, which refers to changes in work patterns and relationships between employers and employees in the context of globalization and technological development. In this context, the power of the traditional "employer" diminishes, and the customer plays a greater role in

determining service quality and performance evaluation. This shift raises questions about the future of work in the transportation sector and workers' rights in the absence of traditional legislative and union frameworks.

Anthony Giddens states: "Globalization, in short, consists of a complex set of processes driven by a mix of political and economic influences. It transforms everyday life, particularly in developing countries, through the creation of transnational systems and power. It is not merely a reflection of contemporary policies; globalization, when viewed holistically, is actively reshaping institutions in the societies we inhabit. It has undoubtedly played a direct role in the emergence of the 'new individualism,' which has become a central point of contention in discussions surrounding social democracy." (Antony.2010.69)

The transformations brought about by smart transportation applications in Algerian social relationships can be understood through the lens of this "new individualism" that Giddens highlights in the context of globalization. These applications, with "Yassir" as a prominent example, foster individual autonomy not only in mobility but also in work. Drivers have become "independent contractors" managing their own businesses through a digital platform, reducing their reliance on traditional companies or employment agencies. While this autonomy can be seen as a gain in terms of flexibility and control over income, it also raises questions about the stability of these jobs and the rights of workers, especially in the absence of legislative frameworks and union structures that previously protected workers' rights. It becomes imperative to consider how to reconcile the benefits of the sharing economy with ensuring social protection for workers in the transportation sector, which is undergoing rapid transformations.

3. Changing the Nature of Interaction in Public Space:

The adoption of smart transportation applications by a significant portion of the population in Algerian cities has impacted the dynamics of "public space," (jin.2021.22) which, according to sociologist Jane Jacobs, is considered an essential space for forming social relationships and building vibrant communities. The feeling of security: "One of the key qualities of a successful city district is that people feel safe and secure on the street among strangers." With the increasing trend towards individual mobility through these applications and the decline in the use of public transportation, which previously provided opportunities for

"spontaneous encounters" between individuals from diverse backgrounds, we are witnessing a decline in opportunities for random social interaction and acquaintance among people from different social and cultural groups. This may lead to an increase in "social isolation" and a decline in the sense of belonging to the "local community," especially in large cities that already suffer from fragmentation and weak social cohesion. In this context, it becomes essential to consider how to maintain the vitality of "public space" and encourage social interaction in Algerian cities as the population increasingly relies on individual mobility through applications.

Habermas emphasizes the importance of this vital space in his statement: "The power of the public sphere is what ultimately prevails, even after liberal democratic revolutions fail," (**Armando.2012.16**) indicating that the "public sphere" expresses a deeper need for communication and interaction between individuals in a free and rational manner, and that it remains influential even in the face of political and social challenges.

4. Changing Gender Relations and Role Redistribution:

Smart transportation applications, in addition to their role in facilitating mobility, have been a significant factor in reshaping gender relations within Algerian society and the way we expect ourselves to think and behave. This is due to the way society is organized, not to biological differences between men and women. (**glossary.2001.04**) By providing a safe and easily accessible mode of transportation, these applications have empowered women to move more freely in public spaces, overcoming some traditional social constraints. This is evident through the increased ability of women to travel independently, even during late hours, without having to rely on male family members, which has enhanced their sense of safety and independence. This shift can be explained through the theory of rational choice, where transportation applications have become, for many women, the optimal choice that combines efficiency and safety compared to other modes of transportation. The impact of this shift is not limited to personal life but extends to social and economic participation, as women are now more able to pursue their work, studies, or engage in various activities without spatial or temporal restrictions. These changes contribute to raising the level of "human capital" in Algeria, as women play a greater role in

public life, which is essential for achieving sustainable and inclusive development.

5. Redefining Trust in Social Interactions:

Smart transportation applications, like "Yassir," are at the heart of a striking transformation in how "trust" is built in Algerian society. Through the evaluation and transparency system provided by these applications, what sociologist Robert Putnam called "social capital" (**Abdelkader.2022.309**) is reinforced, which is a crucial element for the success and prosperity of societies. In Algeria, where "generalized trust" in institutions or individuals may be low due to certain historical and political experiences, smart transportation applications offer a new model for building "institutional trust." This trust is based on mechanisms of transparency and accountability, where users can evaluate drivers and services instantly and publicly, which enhances information exchange, reduces uncertainty, and reshapes the relationship between the user and the service provider away from personal relationships or traditions. This shift raises questions about the extent to which this "evaluation culture" will extend to other areas of daily life in Algeria and whether it will contribute to building a deeper and more comprehensive trust in the long run. The central question here is: Will these mechanisms be able to change social perceptions and enhance trust levels between individuals and institutions in other contexts? The success of this model could have far-reaching implications for the future of social relationships in Algeria, as it could reshape how individuals interact with each other and with public and private institutions, contributing to building a more transparent, interactive, and trusting society. This system has created a type of trust based on professional standards, but at the same time, it may have reduced social relationships that relied on traditional mutual trust without a technological intermediary.

6. Reshaping Social Interactions in Society:

The transformation of the nature of social interaction in public space is one of the most prominent social impacts of smart transportation applications like "Yassir." With the increasing reliance on these applications, we are witnessing a decline in spontaneous interactions that characterized public spaces like bus stops and taxi ranks. Sociologist Jane Jacobs pointed out the importance of these "spontaneous

encounters" (**Abdeen .2017.298**) between individuals from diverse backgrounds in building vibrant cities and fostering social cohesion. In Algerian society, where social interaction in public spaces is an essential element in building cultural and social relationships, this shift raises concerns about the decline of these interactions and their impact on the social fabric.

The shift towards individual and private mobility provided by smart transportation applications has led to a decline in casual conversations and chats that used to take place while commuting in shared spaces, which represented an opportunity for acquaintance and communication between individuals from diverse backgrounds. This shift can be linked to the concept of "increasing individualism" in modern societies, as highlighted by sociologists like Émile Durkheim and Zygmunt Bauman. We can describe it as having reduced societal cohesion and created social aversion.

7. Distribution of Geographic Opportunities in the City:

The impact of smart transportation applications is not limited to individual behaviors; it extends to reshaping the spatial structure itself in Algiers. One of the most significant impacts is the redistribution of the "geography of opportunities" within the city. The flexibility of these applications has led to transformations in the concept of "spatial boundaries," facilitating access to areas that were previously remote or difficult to reach. This has contributed to the emergence of new "urban activity centers" away from traditional centers. This shift is evident in the spread of commercial and entertainment activities in areas that were once marginalized, leading to a redistribution of human movement and a change in access to job opportunities, services, and education across the capital.

This impact can be linked to the concept of the "new geography of opportunity" proposed by geographer David Harvey, which highlights how changes in economic, technological, and transportation systems affect the spatial distribution of opportunities and resources. (**Dived.2017.32**) In the case of Algiers, smart transportation applications contribute to connecting marginalized areas with vital centers, which can lead to increased investment and creation of new job opportunities in these areas. However, the challenges posed by these applications cannot be overlooked, as they have contributed to increased congestion in specific areas, especially those containing major attraction centers,

necessitating a reconsideration of "urban planning" and city infrastructure to ensure a more equitable distribution of opportunities and resources. We note that the east has been connected to the west and the center, and the airport, ports, and universities have become closer thanks to modern transportation networks and their smart applications.

Conclusion:

This study highlights the multifaceted and intertwined impacts of smart transportation applications, with "Yassir" as a prominent example, on Algerian society and its social relationships. While these applications offer significant benefits in terms of facilitating mobility, creating job opportunities, and empowering women, they also raise questions about their impact on "individualism," "solidarity," "public space," "trust," and "opportunity distribution." The sociological analysis indicates that these applications contribute to reshaping the social fabric in Algeria in various ways, as they affect interaction patterns, work, and relationships between individuals and institutions. It is essential to continue studying these transformations and their long-term consequences to understand how to adapt to technological advancements while preserving social cohesion and justice in Algeria.

Recommendations:

- Enhance the social dimension in the development of smart transportation applications: It is recommended to encourage companies developing applications like "Yassir" to consider social and cultural factors when designing and developing these applications.
- Review legislation and public policies: Relevant authorities in Algeria should review laws and regulations related to the transportation sector to ensure the protection of workers' rights in the "sharing economy" and improve their working conditions.
- Support social research and studies: It is important to encourage social researchers to continue studying the impacts of smart transportation applications on Algerian society and provide the necessary support for conducting field studies and in-depth analyses.
- Raise awareness about challenges and opportunities: It is recommended to launch community awareness campaigns that highlight the different impacts of smart transportation applications

and encourage dialogue and participation in finding solutions to the challenges associated with this technology.

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