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An Assessment of Algeria's Digital Transformation: Analytical Study Based on Relevant Indicators

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Abstract

This study analyzes the digital transformation landscape in Algeria, evaluating its progress and identifying key challenges. The research aims to understand the country's digital readiness, focusing on indicators like internet access, mobile technology, digital literacy, e-commerce, and digital payments. It also examines Algeria's performance within the Arab Digital Economy Index (ADEI) and its position within the Arab region. The study utilizes a descriptive analytical approach, drawing on data from international organizations like ITU and the Arab Federation for Digital Economy, Algerian government statistics.

The analysis reveals that while Algeria demonstrates strong mobile network infrastructure and high mobile phone penetration, it faces challenges in expanding fixed broadband, bridging the digital divide, and fostering a more digitally literate society. The study highlights the need for increased investment in digital skills, infrastructure, and a supportive policy environment to encourage innovation and entrepreneurship.

Keywords: Digital Transformation; Arab Digital Economy Index (ADEI); Digital Development; Network Readiness Index; E-commerce, Digital Payments.

Jel Classification Codes : O33, L86, L81.

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1. Introduction:

Digital transformation is no longer a choice, but a necessity for nations seeking to thrive in the 21st century. It's the key to unlocking economic growth, fostering social progress, and empowering citizens. A digitally mature economy empowers businesses to innovate, reach new markets, and create jobs, while citizens gain access to education, healthcare, and government services with greater ease and efficiency.

Algeria, with its vast potential, faces a crucial challenge in achieving a successful digital transformation. While the country has achieved impressive mobile network coverage and penetration, several key areas hold it back. The lack of robust fixed broadband infrastructure, particularly in rural areas, hampers businesses and individuals from fully engaging in the digital economy. Furthermore, limited digital literacy and a challenging regulatory environment hinder innovation and entrepreneurship.

These challenges paint a complex picture for Algeria. While the country has built a strong foundation in mobile technology, it needs to bridge the digital divide and invest heavily in fixed broadband infrastructure, education, and an environment that encourages digital innovation. Only then can Algeria truly leverage the transformative power of digital technology to create a brighter and more prosperous future for its citizens.

This study aims to address the following main problem

What is the reality of digital transformation in Algeria?

Research Hypothesis:

Algeria's digital transformation is hindered by a combination of factors, including insufficient investment in fixed broadband infrastructure, limited access to digital skills training, and a lack of a supportive policy environment for digital innovation and entrepreneurship.

Research Objective: This study aims to:

- Analyze Algeria's digital transformation journey, examining its strengths and weaknesses across key indicators.
- Evaluate Algeria's performance in the Arab Digital Economy Index (ADEI) and its position within the Arab region.
- Identify the major challenges and opportunities facing Algeria's digital development, drawing on available data and insights.

- Propose recommendations to enhance Algeria's digital infrastructure, encourage innovation, and promote inclusive digital literacy.

Significance of study:

This research provides a data-driven analysis of Algeria's digital transformation landscape, offering valuable insights for policymakers, industry leaders, and researchers. The findings will contribute to a better understanding of Algeria's digital development and inform strategies for accelerating digital progress, bridging the digital divide, and maximizing the benefits of a digitally-connected society.

Study methodology and data set:

This study relies on descriptive analytical approach, incorporating secondary data analysis. Data sources include reports from international organizations like ITU and the Arab Federation for Digital Economy, as well as Algerian government statistics and industry publications. The analysis will examine key digital transformation indicators in Algeria, focusing on areas like internet access, mobile technology, digital literacy, e-commerce, and digital payments. The data covers different time periods depending on data availability.

2. Literature Review

(Allali, Guechi, & Berkane, 2022), (Melanyina, Ruzina, Shkvarya, & Verenikina, 2024), (Fahmy, 2024), reveal that digital transformation progress varies across different regions. In Algeria, the digital payments sector is developing slowly due to lack of legal and institutional frameworks, but shows potential for growth. The Middle East is following global digitalization trends, albeit at a slower pace than developed countries, with the process unfolding across various sectors. In Arab countries, research indicates a positive relationship between economic growth, the digital economy, and governance quality. These studies highlight the importance of considering regional contexts, including economic, cultural, and regulatory factors, when examining digital transformation efforts.

(Ulas, 2019), (Parra-Sanchez & Talero-Sarmiento, 2024), Found that research on digital transformation in SMEs shows growing interest in this area. Studies indicate that SMEs are adopting technologies like AI, big data, cloud computing, and IoT. However, they often need external support to integrate digital transformations into their overall strategy. The research emphasizes the importance of cost-benefit analysis for digital technologies in SMEs. Studies also reveal that SMEs often exhibit erratic behaviors in terms of ICT investment. Overall, this category highlights both the

potential and challenges of digital transformation for smaller businesses, emphasizing the need for tailored approaches and support mechanisms.
(Gamage, 2021), In the construction industry, digital transformation faces unique challenges but offers benefits like increased productivity and improved collaboration. Research in this category identifies industry-specific barriers and potential solutions. It also discusses digital transformation phases, processes, and resources specific to construction projects. This category underscores the importance of considering industry-specific factors when implementing digital transformation strategies
(Li & et al, 2023), (Pereira, 2022), demonstrate that both firm digitalization and regional digital industry innovation can promote firm innovation. The impact of firm digitalization on innovation is more visible in digital-related service industries. Research also indicates a spatial spillover effect of digital industrialization. In the context of international business, digital transformation is important for success, but managers often misunderstand its use in internationalization processes. These findings highlight the complex relationship between digital transformation and various aspects of business performance.
(Kraus & et al, 2021), (Trenerry, 2021), provide broader perspectives on digital transformation. Research proposes multi-level frameworks involving individual factors (e.g., technology adoption, skills), group factors (e.g., team communication, adaptability), and organizational factors (e.g., leadership, culture). Studies consider technological, business, and societal impacts of digital transformation. They also identify research gaps and propose future directions, particularly in understanding and mitigating negative impacts on society and the environment. These comprehensive reviews offer valuable insights for both researchers and practitioners in understanding the multifaceted nature of digital transformation.

Overall, these results highlight that digital transformation is a complex process affecting various aspects of businesses and economies. It offers significant potential benefits but also presents challenges, particularly for SMEs and specific industries. The success of digital transformation efforts appears to depend on a combination of technological adoption, organizational readiness, and supportive regional/national environments.

3. Results and Discussion

The most important critical challenges and opportunities facing Algeria towards a digital future will be highlighted through an analysis of key digital transformation indicators.

3.1 Digital Economy indicator

The Arab Digital Economy Index (ADEI) provides a valuable framework for understanding the digital development landscape across the Arab region. By examining the key dimensions and axes of the ADEI, we can gain insights into Algeria's performance and its position within the Arab context. The ADEI focuses on nine axes grouped under five strategic dimensions, offering a comprehensive picture of digital economy and its impact on national development (see Appendix 1).

- **Digital Foundations:**

This dimension assesses the infrastructure, policies, regulations, skills, funding, and governance that underpin a robust digital ecosystem. Algeria scores relatively well in mobile network infrastructure and broadband adoption, particularly for mobile broadband. However, it lags behind in fixed broadband penetration, international bandwidth, and investment in ICT infrastructure. Algeria performs similarly to other Arab countries with moderate to low income levels. The GCC countries lead the region in this dimension.

- **Digital Readiness of Citizens:**

This dimension gauges the level of digital literacy, access, and participation among citizens, aiming to ensure no one is left behind in the digital transition. Algeria exhibits a mixed picture. While the country has high mobile phone ownership, a substantial internet usage gap remains, indicating challenges related to affordability, skills, and quality of access. Additionally, data on ICT skills is limited. Algeria's performance is comparable to other Arab countries in this dimension. The GCC countries generally have a higher digital literacy rate, while Algeria mirrors the trends of other less developed Arab countries.

- **Digital Innovation:**

This dimension assesses the capacity for innovation, research and development, and the creation of new digital products and services. Algeria lags behind other Arab countries, especially those with high income levels. While Algeria has taken steps to promote innovation, investment in R&D and the creation of a supportive environment for innovation needs further emphasis. Algeria falls behind the GCC countries and other emerging economies in this dimension, highlighting a need for greater focus on innovation.

- **Digital Business:**

This dimension examines the extent to which businesses leverage digital technologies to improve efficiency, expand reach, and create value. Algeria shows some progress in utilizing digital technologies, but its performance is moderate compared to other Arab countries. Its performance is particularly impacted by challenges in financing, access to capital, and a complex regulatory environment. Algeria's performance falls below the GCC countries and other emerging economies in this dimension, indicating a need for improvements in business regulation and support for digital transformation.

- **Digital Government:**

This dimension evaluates the effectiveness of government services, policies, and digital infrastructure in meeting citizens' needs and promoting a more efficient and transparent public sector. Algeria exhibits moderate performance in this dimension, with ongoing efforts to enhance e-government services. However, challenges remain in integrating technologies, improving data infrastructure, and fostering greater citizen participation in government processes. Algeria's performance falls behind the GCC countries, which have made significant progress in establishing digital government systems. Algeria needs to strengthen its commitment to digital government initiatives and invest in the necessary infrastructure and skills.

Algeria's performance in the ADEI reflects a mix of progress and challenges. While it has built a solid foundation in mobile infrastructure and adoption, it needs to address the digital divide, improve fixed broadband penetration, and encourage greater investment in ICT skills and innovation. Algeria's current economic situation and reliance on traditional sectors present significant challenges to accelerating digital transformation. To achieve its digital ambitions, Algeria needs a more focused and strategic approach to digital development.

3.2 Digital Development

According to Algeria's digital development landscape based on ITU data collected in 2022 (see appendix 2), note that some areas display positive indicators, others highlight areas requiring significant attention and investment.

-Infrastructure & Access :

- **Network Coverage:** Algeria boasts impressive mobile network coverage with 98% of the population covered by both 3G and 4G

networks. This indicates a solid foundation for mobile internet access and digital inclusion.

- **Mobile Phone Ownership:** With 88% of individuals owning a mobile phone, Algeria demonstrates high mobile phone penetration, further contributing to digital connectivity.
- **Internet Access at Home:** While 74% of households have internet access, there exists a significant urban-rural divide. Urban households enjoy 81% access, while rural households lag behind at 60%. This gap necessitates targeted policies to bridge the digital divide.
- **Broadband Subscriptions:** Algeria boasts a high mobile-broadband subscription rate at 100 per 100 inhabitants, demonstrating a significant adoption of mobile data services. However, fixed broadband subscriptions remain significantly lower at 10 per 100 inhabitants. This disparity suggests a need for investment in fixed broadband infrastructure to enhance internet connectivity and cater to evolving digital needs.
- **Fixed Broadband Speeds:** The data reveals a reliance on high-speed fixed broadband connections, with 100% of subscriptions exceeding 10 Mbit/s. This indicates a positive trend towards high-speed internet access for fixed broadband users.
- **International Bandwidth:** With 62 kbit/s per internet user, Algeria's international bandwidth is relatively low compared to other countries. This can affect online experiences like streaming and downloading, highlighting the need for investments in network capacity.

-Internet Use & Enablers/Barriers:

- **Internet Usage:** The estimated internet usage rate is 71%, highlighting a significant portion of the population engaged in online activities.
- **Age Demographics:** The internet usage rates amongst different age groups are notable. While 69% of 15-24-year-olds utilize the internet, the rate falls to 45% for 25-74-year-olds, highlighting a need to bridge the digital divide across generations.

- **Gender Divide:** The data reveals a gender gap in internet usage. While 55% of males utilize the internet, only 43% of females do. Addressing this gap requires targeted initiatives to promote digital literacy and access for women.
- **ICT Prices:** The low cost of mobile data and voice baskets compared to GNI per capita suggests relatively affordable mobile connectivity. However, the fixed broadband basket remains relatively expensive, potentially hindering wider adoption of fixed broadband services.
- **Broadband Traffic:** The high average monthly mobile broadband traffic per subscription indicates a substantial demand for mobile data. However, the average monthly fixed broadband traffic, although significantly higher, highlights a reliance on fixed broadband for bandwidth-intensive tasks.

3.3 Network Readiness Index (NRI)

Table 1 showcases Algeria's overall NRI score and its ranking within a global context over three years

Table.1 Algeria's NRI Performance Overview during the period 2021-2023

Years	Score	Rank	Technology	People	Governance	Impact
2021	38.93	100 (out of 130)	36.88	40.61	35.20	43.02
2022	39.48	100 (out of 131)	33.58	37.92	39.41	47.02
2023	37.52	103 (out of 134)	31.45	35.63	41.18	41.82

Source: (Dutta & Lanvin, 2021, 2022, 2023)

While Algeria's NRI score fluctuated slightly over the three years, it remained stagnant at around 38-39, indicating a lack of significant progress in digital readiness. The score has consistently placed Algeria within the bottom half of the NRI ranking, highlighting areas for improvement.

Algeria's ranking dropped from 100th out of 130 countries in 2021 to 103rd out of 134 countries in 2023, signifying a slight decline in relative performance compared to other nations. This declining ranking suggests

that Algeria may be falling behind in its digital development compared to its peers.

As for the pillar performance, we note that:

- The **Impact** pillar consistently performed best, indicating that Algeria is relatively successful in harnessing existing digital infrastructure for positive societal outcomes.
- However, the **Technology** pillar has consistently scored the lowest, highlighting a need for improvement in areas like internet infrastructure, affordability, and digital skills development.
- The **Governance** pillar showed a moderate score, suggesting a need for better regulatory frameworks and digital policies to support the digital economy.
- **People** pillar displayed fluctuating scores, indicating a lack of consistent progress in closing the digital divide and fostering a digital culture.

Table 2 compares Algeria's NRI performance with the averages of its income group (lower-middle income countries) and its geographical region (Arab states).

Table.2 Algeria scores vs. averages of its income group and region, overall and by pillar

dimension	Algeria	Lower-middle-income countries	Arab states
NRI	37.52	38.41	46.59
technology	31.45	32.12	41.17
people	35.63	34.38	42.66
governance	41.18	43.27	53.45
impact	41.82	43.89	49.08

Source: (Portulans Institute, 2023)

From the table above we note that Algeria scores slightly below the average for lower-middle income countries, indicating that its digital readiness is comparable to its peer group. However, Algeria significantly lags behind the Arab states average, highlighting a significant opportunity for improvement by catching up with its regional peers.

- In **Technology**, Algeria lags behind both its income group and regional average, suggesting a critical need for improvement in internet access, affordability, and digital skills development.
- In **People**, Algeria falls slightly below the lower-middle income average but performs better than the Arab states average, indicating a need for continued efforts to improve digital literacy and inclusivity.
- In **Governance**, Algeria lags behind the lower-middle income average but performs better than the Arab states average,

demonstrating a need for policies that stimulate digital growth and protect citizens' digital rights.

- In **Impact**, Algeria performs slightly above the lower-middle income average but below the Arab states average, signifying a need for leveraging existing infrastructure more effectively for social and economic benefits.

3.4 E-commerce

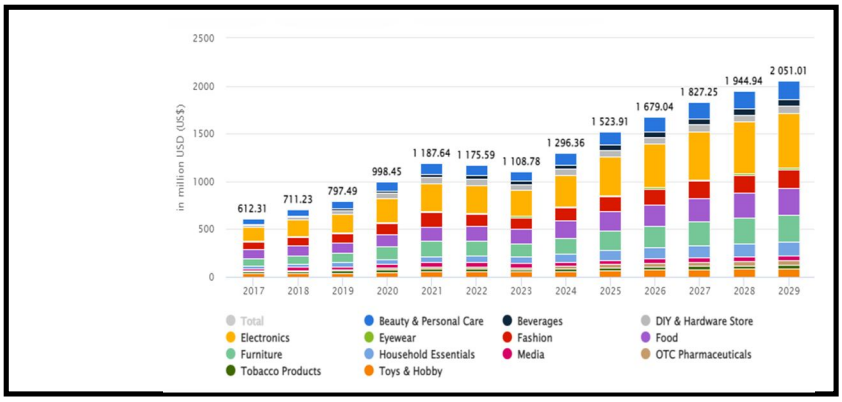
Despite challenges, Algeria's e-commerce market holds enormous potential for growth. By leveraging its growing internet penetration, smartphone adoption, and government support, Algeria can develop a vibrant and inclusive e-commerce sector that contributes to economic development, job creation, and increased consumer choice. Addressing payment infrastructure, logistics, consumer awareness, and competition will be crucial for realizing this potential.

-Revenues

The Algerian legislator defined e-commerce in Article 6, paragraph 1 of Law No. 18-05 as the activity whereby an electronic provider proposes or guarantees the provision of goods and services remotely to an electronic consumer, through electronic communications (شرقي و صفيح، 2023، صفحة 139).

Projects e-commerce revenues in Algeria to reach USD 2.05 billion by 2029, a significant jump from the estimated USD 1.29 billion in 2024, which represents an increase of about 58.91%, and electronics represent the largest percentage of e-commerce revenues (see Fig.1).

Figure.1 Algeria's e-commerce revenues during 2017-2029



Source: (Statista, eCommerce-Algeria, 2024)

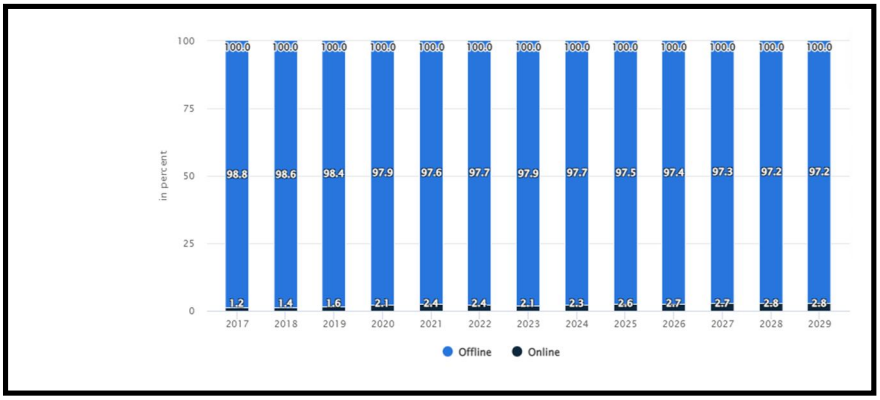
This growth is fueled by several factors:

- **Increasing Internet Penetration:** Algeria is experiencing a steady rise in internet users, expanding the potential customer base for online retailers.
- **Smartphone Adoption:** The growing use of smartphones provides convenient access to e-commerce platforms.
- **Shifting Consumer Preferences:** Algerian consumers are increasingly embracing the convenience and variety offered by online shopping.
- **Government Support:** The government is actively promoting e-commerce as a means to diversify the economy and create new job opportunities.

-Sales:

Figure 2 shows Algeria's e-commerce Sales channels during 2017-2029.

Figure. 2 Algeria's e-commerce Sales channels during 2017-2029



Source: (Statista, eCommerce-Algeria, 2024)

- **Dominance of Mobile:** mobile commerce is likely to dominate the e-commerce landscape in Algeria. This is driven by the increasing affordability of smartphones and the convenience they provide for online shopping.
- **Importance of Marketplaces:** Marketplaces like Jumia and Amazon are likely to play a crucial role in providing access to a wider product range and facilitating transactions for Algerian consumers.

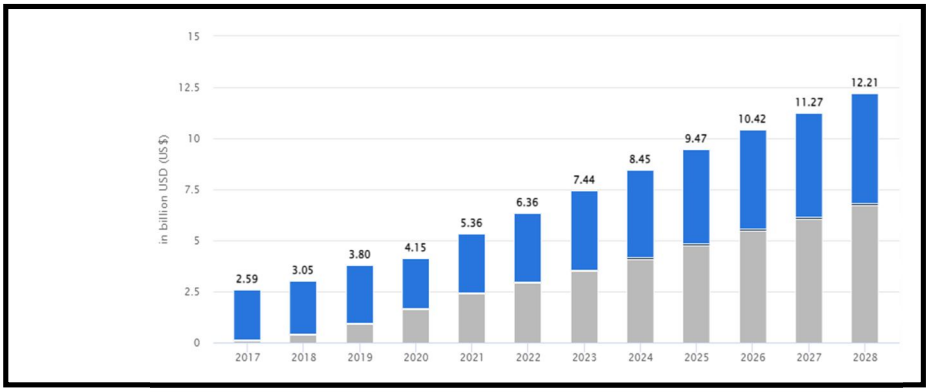
3.5 Digital payments

Overcoming challenges related to financial inclusion, payment infrastructure, security, and consumer education will be critical for accelerating adoption and maximizing the potential of digital payments in Algeria.

-Transaction Value by Segments:

The total transaction value of digital payments in Algeria forecast to reach USD 12.21 billion by 2029, significantly up from USD 8.45 billion in 2024 (see Fig.3).

Figure 3. Algeria's transaction value by segments during 2017-2029



Source: (Statista, Digital payments-Algeria, 2024)

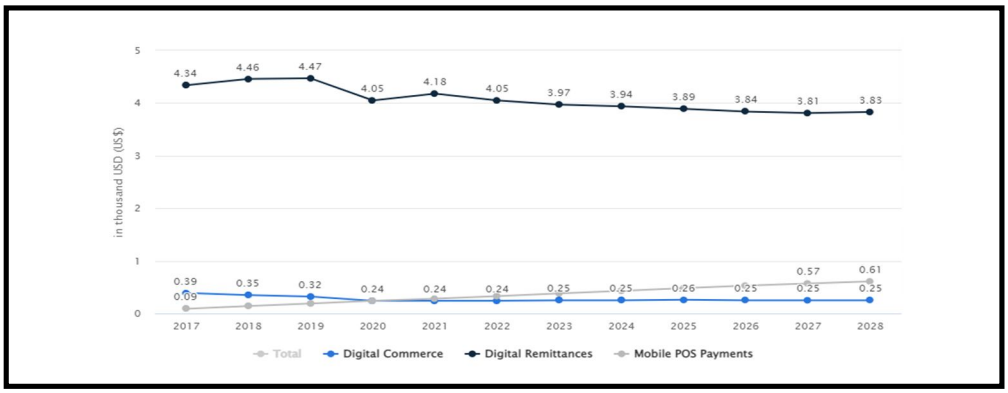
As for the breakdown by segment, we can deduce some trends:

- **E-commerce:** With the projected growth of e-commerce in Algeria, we can expect a corresponding increase in digital payments for online purchases.
- **P2P Transfers:** Peer-to-peer money transfers, often facilitated through mobile wallets and apps, are likely to gain momentum as a convenient and accessible means of sending and receiving money.
- **Bill Payments:** Digital bill payments for utilities, telecommunications, and other services are likely to become more prevalent as consumers seek convenience and efficiency.
- **Government Services:** As Algeria digitizes government services, we can anticipate a growing demand for online payments for taxes, fees, and other transactions.

- Average Transaction Value Per User:

Fig.4 depicts the average transaction value per user for various digital payment methods in Algeria from 2017 to 2028, measured in thousands of US dollars. The figure shows that the overall average transaction value (represented by the grey line) has been steadily increasing over the years, indicating growing adoption of digital payments in Algeria.

Fig.4 Algeria's Average Transaction Value Per User during 2017-2029



Source: (Statista, Digital payments-Algeria, 2024)

- **Digital Commerce**: This segment shows a decreasing trend, with the average transaction value dropping from USD 0.39 thousand in 2017 to USD 0.25 thousand in 2028. This might indicate a shift in consumer preferences towards other digital payment methods.
- **Digital Remittances**: The average transaction value for digital remittances has remained relatively consistent and flat, with a slight decline since 2021. This suggests a stable market for digital remittances in Algeria.
- **Mobile POS Payments**: This segment has experienced a more gradual growth, with a higher average transaction value than digital commerce but lower than digital remittances. This indicates a growing preference for mobile POS payments, especially since 2025.

It appears that while digital payments in Algeria are growing overall, the dominance of digital commerce is lessening. Consumers are increasingly favoring mobile POS payments, potentially for their convenience and wide availability.

-Algerian requirements for supporting digital payments:

The most important requirements to support electronic payment in Algeria can be summarized as follows (Allali, Guechi, & Berkane, 2022):

- **Strengthening ICT Infrastructure:** Algeria needs to expand its internet coverage, particularly in rural areas, and enhance fixed broadband infrastructure to create a more robust digital environment.
- **Developing a Comprehensive Legal Framework:** A robust legal framework is crucial to regulate digital transactions, protect

consumers, and encourage innovation within the digital payments ecosystem.

- **Activating the Banking System:** Algeria needs to modernize its banking system, increase financial inclusion, and attract both national and international competition to facilitate digital payment services.
- **Addressing the Informal Economy:** The prevalence of the informal sector in Algeria poses a major challenge to the adoption of digital payments. Policies need to address this to foster a more formal and transparent market.
- **Building a Digital Culture:** Raising awareness and promoting digital literacy among Algerian citizens is essential to foster trust and encourage widespread adoption of digital payments.

5. Conclusion:

Algeria's digital transformation analysis presents both encouraging signs and significant challenges. The country needs to move beyond its strengths in mobile technology and address the digital divide, strengthen fixed broadband infrastructure, invest in digital skills development, and create an environment conducive to innovation and entrepreneurship. While Algeria has shown progress in some areas, its overall digital readiness remains below the average for both its income group and the Arab region, indicating a need for a more strategic and holistic approach to digital development.

The analysis of digital transformation indicators in Algeria reveals a multifaceted picture of development, with areas of strength and significant challenges. The most important results of the study can be summarized as follows:

- Digital Economy: While Algeria performs relatively well in mobile network infrastructure and broadband adoption, especially for mobile broadband, it lags behind in fixed broadband penetration, international bandwidth, and investment in ICT infrastructure. Algeria's performance mirrors that of other moderate to low-income Arab countries, with the GCC states leading the region.
- Digital Development: Algeria shows mixed progress in digital development. High mobile phone ownership contrasts with a substantial internet usage gap, highlighting challenges in affordability, skills, and quality of access. Data on ICT skills is

limited. Algeria's performance is comparable to other Arab nations in this dimension.

- Network Readiness Index (NRI): Algeria's Network Readiness Index score remains stagnant, suggesting a lack of significant progress in digital readiness. It consistently ranks in the bottom half of the NRI ranking globally, highlighting areas needing improvement. Algeria's performance falls below the average for both its income group and the Arab region.
- E-commerce: Algeria's e-commerce sector exhibits potential for growth, driven by increasing internet penetration, smartphone adoption, and government support. However, developing a secure payment infrastructure, efficient logistics, raising consumer awareness, and addressing competition remain key challenges.
- Digital Payments: Algeria's digital payments market shows significant growth potential, driven by e-commerce, P2P transfers, and government digitalization. Yet, overcoming challenges related to financial inclusion, payment infrastructure, security, and consumer education is crucial to accelerating adoption.

The analysis **supports the hypothesis** that Algeria's digital transformation is hindered by a combination of factors. Insufficient investment in fixed broadband infrastructure, coupled with limited access to digital skills training and a lack of a supportive policy environment for digital innovation, are major obstacles.

Recommendations:

To accelerate Algeria's digital transformation and unlock its full potential, policymakers and stakeholders need to prioritize:

- **Investing in Fixed Broadband Infrastructure:** Expanding fixed broadband networks is crucial to meet growing demand, bridge the digital divide, and enable businesses and individuals to fully engage in the digital economy.
- **Promoting Digital Inclusion:** Bridging the digital divide requires targeted initiatives to improve connectivity in rural areas, increase internet affordability, and enhance digital literacy among all populations.
- **Building a Supportive Policy Environment:** Algeria needs to create a policy framework that encourages innovation and entrepreneurship, attracting investment, and nurturing the growth of a competitive digital sector. This includes streamlining regulations, providing incentives, and supporting education and skills development.

- **Strengthening E-Government:** Algeria must strengthen its commitment to e-government initiatives, investing in the necessary infrastructure and skills to improve efficiency, transparency, and citizen participation in government processes.

6. Appendices:

Appendix 1. Algeria's Digital Economy Performance

Year	Dimension	Axis	Score	Comment
2018	Digital Foundations	Infrastructure & ICT	Not available	
		Knowledge & Technology	Not available	
		Financial Market Growth	Not available	
	Digital Readiness of Citizens	Education & Skills	Not available	
	Digital Innovation	Innovation	Not available	
	Digital Business	Business Environment & Network Readiness	Not available	
	Digital Government	E-Government	Not available	
2020	Digital Foundations	Infrastructure & ICT	Not available	
		Knowledge & Technology	10.58	Moderately low performance, needs more focus on ICT skill development
		Financial Market Growth	Not available	
	Digital Readiness of Citizens	Education & Skills	38.55	Moderately low performance, significant digital divide to address
	Digital Innovation	Innovation	28.82	Moderately low performance, requires greater investment in R&D and supportive ecosystem
	Digital Business	Business Environment & Network Readiness	28.47	Moderately low performance, challenges in financing, capital, and regulation

	Digital Government	E-Government	32.62	Moderately low performance, needs to integrate technologies and improve data infrastructure
2022	Digital Foundations	Infrastructure & ICT	Not available	
		Knowledge & Technology	Not available	
		Financial Market Growth	59.23	Moderately low performance, needs to improve access to finance and capital
	Digital Readiness of Citizens	Education & Skills	Not available	
	Digital Innovation	Innovation	43.54	Moderately low performance, requires greater investment in R&D and supportive ecosystem
	Digital Business	Business Environment & Network Readiness	28.33	Moderately low performance, challenges in financing, capital, and regulation
	Digital Gouvernement	E-Gouvernement	51.73	Moderately low performance, needs to integrate technologies and improve data infrastructure

Source: (الاتحاد العربي للاقتصاد الرقم و مجلس الوحدة العربية، 2021)
(الاتحاد العربي للاقتصاد الرقم و مجلس الوحدة العربية، 2020)
(الاتحاد العربي للاقتصاد الرقم و مجلس الوحدة العربية، 2022)

Appendix 2: Algeria's Digital Development: Key Data Points (2022)

Category	Indicator	Value
Infrastructure & Access	Population covered by mobile-cellular network	98%
	Population covered by 3G network	98%
	Population covered by 4G network	86%
	Mobile phone ownership	88%
	Households with computer	42%
	Households with internet access	74%
	Rural households with internet access	60%
	Urban households with internet access	81%
	Female mobile phone ownership	83%
	Male mobile phone ownership	93%
	Mobile subscriptions per 100 inhabitants	109
	Fixed telephone subscriptions per 100 inhabitants	12
	Active mobile broadband subscriptions per 100 inhabitants	100
	Fixed broadband subscriptions per 100 inhabitants	10
	International bandwidth per internet user (kbit/s)	62
	Fixed broadband speed (> 10 Mbit/s)	100%
Internet Use	Individuals using the internet	71%
	15-24 years using internet	69%
	25-74 years using internet	45%
	75+ years using internet	4%
	Female internet use	43%
	Male internet use	55%
Enablers & Barriers	Fixed broadband basket as % of GNI p.c.	3.9%
	Mobile data & voice basket (high consumption) as % of GNI p.c.	2.4%

	Mobile data & voice basket (low consumption) as % of GNI p.c.	2.4%
	Mobile cellular basket as % of GNI p.c.	1.6%
	Mobile broadband basket as % of GNI p.c.	0.7%
	Average monthly fixed broadband traffic (MB)	162364
	Average monthly mobile broadband traffic (MB)	6537

Source: **(ITU, 2023)**

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