

## Electronic payment as an accelerator of digital financial inclusion: The case of Algeria (2016-2025)

Zourdani Safia <sup>1</sup>

<sup>1</sup> Lecturer class A, Mouloud MAMMERI University of Tizi-Ouzou, Faculty of Economic, Commercial and Management Sciences, Laboratory: Development, Economics, Finance and Institutions (DEFI), Algeria, Address (BP 17 RP 15000, Tizi-Ouzou), Algeria. Email: [safia.zourdani@ummo.dz](mailto:safia.zourdani@ummo.dz)

**Abstract**---This paper analyzes the growing role of electronic payment (e-payment) as an accelerator of digital financial inclusion in Algeria over the period 2016-2025. Employing a mixed-methods approach combining documentary analysis of statistical data from the GIE Monetique with a review of international literature, this research highlights the growth dynamics of e-payment, its institutional and technological determinants, and its effects on expanding access to financial services. The results reveal increased growth in electronic transactions, the rise of online payments, and the increase in mobile payments and P2P transfers. However, significant structural constraints persist, such as the predominance of the informal economy, the low density of micro-enterprises, and weak technological infrastructure. This study contributes to the literature on digital financial inclusion by highlighting some public policy recommendations adapted to the Algerian context.

**Keywords**---E-payment, Digital transformation, Digital financial inclusion, GIE Monetique, Algeria.

**JEL Classification:** F44, G20, G21.

### 1. Introduction

The digital revolution has profoundly reconfigured financial systems worldwide, making electronic payment one of the most powerful levers of digital financial inclusion (Zahdour, 2022). In developing and emerging economies, e-payment represents an opportunity to overcome geographical, institutional, and socioeconomic barriers that have long excluded entire segments of the population from formal financial services.

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Algeria, an upper-middle-income country, is not exempt from this global dynamic (Lamine & Cherchem, 2024). Since the official launch of its national e-payment platform in 2016, the country has embarked on a path of modernizing its payment system, supported by a gradually strengthened regulatory framework and significant public investments in digital infrastructure (Hadj Ali, 2025). The Monetary Economic Interest Group (monétique, 2026) created in 2014 to regulate and promote interbank electronic payment constitutes the central actor of this transformation.

Priority is given to the development of the digital banking sector in the government's action plan (Mebarki & Mebarki, 2025), the Algerian Minister of Finance recalled the measures taken by public authorities, such as updating laws, introducing e-payment and the central bank's digital currency in the 2023 monetary and banking law, allowing the creation of specialized companies for payment service providers.

It is also, within the framework of these reforms, about the creation of a specialized commission responsible for implementing a national e-payment development strategy, while encouraging modern financial technology companies, called FINTECH, to offer innovative financial services. Highlighting the role of e-payment in accelerating digital financial inclusion (Mazouz & Derrar, 2025), the minister stated that this service constitutes "one of the pillars of socio-economic development" and allows every citizen to access to secure financial services, thus reflecting.

The Algerian approach to modernizing payment systems and expanding the use of modern payment tools primarily aims to reduce the volume of the informal economy, to combat currency counterfeiting, to broaden digital financial inclusion, as well as to prevent and fight money laundering and corruption.

Due to its importance, a short-term government action plan for the development of e-payment methods in Algeria has been established and developed by the National Payments Commission, which includes several measures aimed at removing obstacles and accelerating the development of innovative payment methods, thus promoting banking transactions and strengthening digital financial inclusion. The Bank of Algeria, like all central banks, has ensured the reinforcement of the balance between supporting innovation in banking services and preserving financial stability through risk management, consumer protection, and compliance with anti-money laundering requirements.

Emphasis should also be placed on the importance of the digital transition plan in Algeria, particularly in its aspect related to the digitization of government services, in order to facilitate communication between institutions and individuals, as well as digital financial inclusion to generalize financial services to all segments of society through financial techniques adapted to everyone's needs. Local and international authorities, represented by the Ministry of Finance and the Bank of Algeria (Ben oudina & Morsli, 2024) in collaboration with the Arab Monetary Fund, have placed great importance on innovation in finance, financial services, open banking, payment service providers, and instant payment systems.

Several publications show that electronic payment has established itself as one of the most powerful drivers of financial inclusion. The pioneering work of (Franklin, Asli, Leora, & Maria, 2016), (Gonçalo & Tiago, 2015), (Mandira & Jesim, 2011) Insisting on the strategic role of digital payment infrastructures in expanding access to formal financial services, particularly in developing economies where a significant portion of the population remains unbanked.

The problem of this research revolves around the following central question:

To what extent does the development of e-payment serve as a driver for digital financial inclusion in Algeria over the period of 2026-2025, and what are the determining factors and structural constraints that affect its effectiveness?

This study sheds light on the digital transformation of the Algerian financial sector and its role in democratizing access to financial services. It is important because it allows for measuring progress: tracking the advancement of public policies and private initiatives aimed at modernizing the payment system and reducing dependence on cash, assessing social impact. Understanding how e-payment has contributed to the inclusion of unbanked populations, particularly young people and rural areas, identifying obstacles and opportunities: analyzing barriers (infrastructure, trust, regulation) and levers (FinTech innovation, mobile banking) to strengthen adoption. Finally, supporting the national strategy: providing useful data to policymakers to adjust financial digitalization policies and support economic growth.

This article has a threefold objective: to analyze the quantitative and qualitative evolution of e-payment in Algeria over the decade 2016-2025 using data from GIE Monétique and, to examine the institutional, technological, and behavioral determinants of its adoption also to assess its effects on digital financial inclusion and identify the levers for action to strengthen this dynamic.

This paper is developed based on a mixed methodological approach, based on a review of the literature of several documents to popularize the concepts of e-payment and digital financial inclusion, and an analytical approach based on official statistics published in the reports of the GIE Monétique. This is what we will elaborate on in the main points of this contribution. This article is structured as follows: present the conceptual framework, explain the adopted methodology, analyze the evolution of e-payment in Algeria, and discuss the results in terms of digital financial inclusion. Finally, propose some public policy recommendations.

## **2. Conceptual framework, international and Algerian experiences**

### **2.1. Digital financial inclusion: conceptual approach**

Financial inclusion refers, in a broad sense, to access to and the use of formal financial services that are affordable and tailored to the needs of individuals and businesses. The digital dimension of this concept specifically relates to the use of information and communication technologies (ICT) to extend access to financial services, particularly payment, savings, credit, and insurance.

### **2.2. E-payment and financial inclusion: international use case**

The Kenyan experience with M-Pesa, launched in 2007, remains the most cited international reference in mobile payment and financial inclusion. It has been shown that M-Pesa enabled the financial inclusion of more than 70% of the adult Kenyan population and had significant positive effects on poverty reduction (Sam & Zourdani, 2020), particularly for rural households. It is estimated that M-Pesa lifted 196,000 households out of poverty, including 185,000 headed by women. This international experience converges on three major lessons, namely: interoperability is a sine qua non condition for large-scale adoption, regulatory simplification, public-private partnerships are essential catalysts, and populations excluded from formal channels can be effectively reached through mobile payment.

### **2.3. The Algerian Experience**

The Algerian context presents distinctive characteristics that require specific analysis. The informal economy, estimated at 8,273 billion dinars according to the Bank of Algeria report of November 2024, represents about 34% of the total money supply in circulation. This predominance of cash constitutes the main structural obstacle to digital financial inclusion (Mansouri & Tounsadi, 2021). The Algerian population is characterized by a pronounced youthfulness (60% of the population under 35 according to the 2023 census), a mobile internet penetration rate above 70%, and a very developed mobile phone culture.

These demographic and technological characteristics are considerable assets for the adoption of e-payment and m-payment. On the regulatory level, the Algerian legal framework has undergone

significant developments since 2016. Digital financial inclusion consists of providing all individuals with an equitable and affordable access to financial and technological services, thereby helping to reduce economic inequalities (Bensehamdi & Chouam, 2022).

In other words, it represents the provision of basic financial services at low costs, access for individuals and businesses excluded from all ranges and useful services adapted to their needs, and digital transformation represents the replacement of existing manual business processes with the latest digital alternatives (Mesloub & Moussaoui, 2024). Digital financial inclusion falls within several contexts:

- political and legal context, notably through the encouragement of public authorities for the development of digital banking services, government initiatives aimed at promoting online payment, particularly following the COVID-19 health crisis (Ahmed youra & Abd-dayem, 2025), and the implementation of a regulatory framework (law on e-commerce, electronic signature and data protection, mobile payment...);
- economic context, through the main economic indicators recovering after the recession due to the crisis in the second quarter of 2021. GDP rebounded and recorded an increase of 6.4% after the decline in activity in the second quarter of 2020, the restored balance of payments with 5 billion dollars in non-oil exports (Boussouf & Belkaid, 2021). The 2022 Finance Bill incentivizing purchasing power (unemployment benefits, tax reduction on low wages), the high share of informal trade in the economy, which constitutes an obstacle to banking (Benmadani, 2022), and the increase in household deposits, this customer segment represents an opportunity for the bank;
- social context, the population is predominantly urban and young (with an urbanization rate of 74%, an average age of 28.6 years), the population is increasingly literate (literacy rate of 92% in 2021). The youth segment is more comfortable with digital technology and massively engages with social media. This segment therefore constitutes a privileged target (Benabdellah, 2025);
- technological context, with an internet penetration rate of more than (65%), a 3G/4G connectivity penetration rate of (80.2%), the multiplication of initiatives aimed at digitalizing administrative procedures, and the insufficiency of existing technological infrastructure for the mass processing of data (Toumi & Mokrani, 2026).

The economic and technological context is moderately favorable to digital financial inclusion. Meanwhile, the share of the informal market and the insufficiency of technological infrastructures remain a major barrier to digital financial inclusion.

### 2.3.1. Scope of digital financial inclusion in Algeria

**Table 1. The main axes of digital financial inclusion in Algeria**

Axes	Designation	Explanation
1	Universal access to financial services	Ensure that all individuals and businesses have access to basic financial services, such as bank accounts, savings services, and electronic payment methods.
2	Financial education	Provide financial education and awareness to enable people to understand how to manage their finances, invest, and use financial services responsibly.
3	Inclusion of marginalized populations	Target groups traditionally excluded from the financial system, such as rural populations, women, young people, low-income individuals, and people with disabilities.
4	Digitalization of financial services	Promote the digital transformation of financial institutions to offer online banking services, user-friendly mobile

Axes	Designation	Explanation
		applications, online lending platforms, electronic payment systems, etc.
5	Modern payment infrastructures	Implementation of fast, affordable, and secure electronic payment systems to facilitate financial transactions, particularly electronic payments and money transfers.
6	Accessible insurance services	Promote access to affordable insurance products to protect individuals and businesses against financial risks.
7	Consumer protection	Implement regulations and consumer protection mechanisms to ensure that users of digital financial services are treated fairly and safely.
8	Public-private collaboration	Encourage collaboration between governments, financial institutions, technology companies, and civil society organizations to promote financial inclusion and digital transformation.
9	Technological innovation	Support research and development of new financial technologies (Fintech) to improve accessibility, efficiency, and user-friendliness of financial services.
10	Impact measurement	Regularly assess the impact of financial inclusion and digital transformation initiatives to ensure that they achieve their goals in terms of financial equality and economic development.

Source: author, synthesis of several documents.

The analysis of Table No.1 shows that the promotion of digital financial inclusion requires the adaptation of a well-studied strategy due to the major challenges faced by the main actors. These challenges consist of:

- limited infrastructures;
- financial illiteracy;
- data security;
- regulatory barriers;
- exclusion of marginalized groups;
- user trust.

### 2.3.2. Actors of digital financial inclusion in Algeria

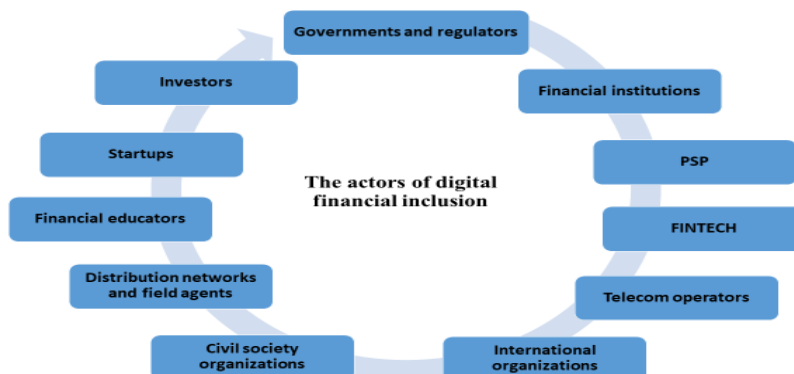


Figure No. 1: Main actors of digital financial inclusion in Algeria

Source: author

The figure above informs us about the importance of the ecosystem that brings together the main actors to engage in a common dynamic, which is that of digital financial inclusion. The initiatives of the latter are multiple, mainly involving mobile payments, electronic wallets, online banking services, biometric technologies, electronic signatures, peer-to-peer (P2P) platforms, online financial education, public-private partnerships, the reduction of transaction costs, and online insurance services.

Thus, all these efforts are deployed to encourage digital financial inclusion because of these significant advantages. First, it facilitates access: financial services are available at anytime, anywhere, and from any connected device. In addition, digital transactions are often less expensive, eliminating travel and cash handling fees.

Finally, digital financial inclusion promotes the economic participation of marginalized groups and facilitates social integration. Numerous different motivations of the actors have been carried out to deploy mobile payment; the summary is shown in the following figure:

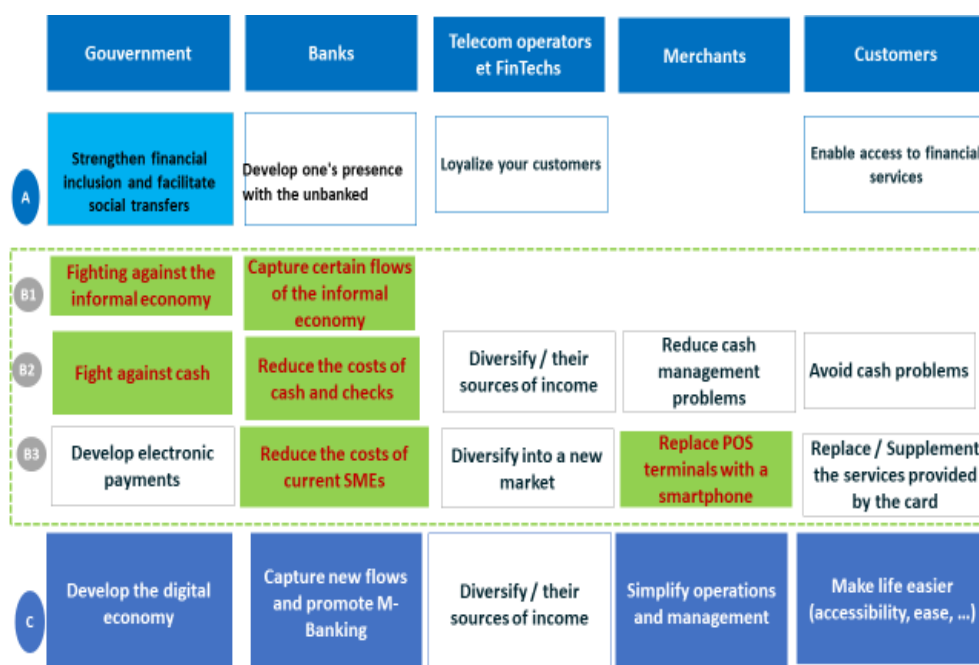


Figure n°02: mobile payment deployment strategy in Algeria

Source: author.

More than just a means of transaction, mobile payment is a driver of the development of e-commerce and mobile commerce, supported by trusted intermediaries such as banks, telecom operators, or third-party providers who ensure the authentication and validation of operations (Lamine N.-e. , 2025)

### 2.3.3. National strategies for promoting digital financial inclusion

Expanding infrastructure: this means investing in technologies and networks to improve connectivity and coverage, promoting financial literacy: providing training and resources to strengthen the population's financial knowledge and increasing trust: this means enhancing data security and informing users about cyber security practices.

In addition to these strategies, major initiatives have been deployed: the interoperability of banks' payment systems with those of the postal service, the development of a national strategy for mobile payments, and the project to establish a mobile switch ensuring the interoperability of mobile payment

solutions from January 2025. Attention is also focused on strengthening the regulatory framework. Indeed, several highlights have marked this aspect, namely:

**Table 2: regulatory framework in favor of digital financial inclusion**

N°	Law	Reference
01	Mandatory POS Terminal	The 2018 finance law obliges merchants to offer payment by POS terminal.
02	Electronic Signature	Law 15-04 setting the general rules regarding electronic signature and certification.
03	E-commerce	Law 18-05 governing electronic commerce and protecting consumers. It establishes electronic payment.
04	The law on personal data protection	Law 18-07 relating to the protection of natural persons in the processing of personal data came into force on August 10, 2023, in accordance with Article 75.
05	Monetary and banking laws	Law No. 23-09 of June 21, 2023, concerning the Monetary and Banking Law. Introduction, among others, of: <ul style="list-style-type: none"> <li>▪ Digital Bank;</li> <li>▪ Payment Service Provider (PSP);</li> <li>▪ Central Bank Digital Currency (CBDC);</li> <li>▪ National Payments Council (CNP).</li> </ul>
06	Establishment of the national payments council	The National Payments Committee (CNP) is responsible for developing the draft national strategy for the development of written means of payment to strengthen banking transactions and financial inclusion.

*Source: author, compilation of the laws.*

The entirety of this regulatory framework argues in favor of digital financial inclusion. The intention of the Algerian State is very clear through this relaxed and explicit regulatory framework. We will, through the compilation of reports from the GIE Monétique, verify and then analyze the expected results from the launch of this initiative in 2016 until 2025.

### 3. Results, Analysis & Discussion

**Table 3: Annual evolution of the main E-payment activities in Algeria**

Year	2016	2017	2018	2019	2020
Internet payments	7 366	107 844	176 982	202 480	4 593 960
	<b>15 009</b>	<b>267 993</b>	<b>332 592</b>	<b>503 870</b>	<b>5 423 727</b>
Payments on POS terminal	65 501	122 694	190 898	274 624	711 777
	<b>444 508</b>	<b>861 775</b>	<b>1 335 334</b>	<b>1 916 994</b>	<b>4 733 820</b>
ATM withdrawal	6 868 031	8 310 170	8 833 913	9 929 652	58 428 933
	<b>98 822 524</b>	<b>126 398 291</b>	<b>136 233 452</b>	<b>164 116 233</b>	<b>1 073 004</b>
Intra-bank mobile payment	-	-	-	-	-
	-	-	-	-	-
Intra-bank	-	-	-	-	-

Year	2016	2017	2018	2019	2020
P2P transfer	-	-	-	-	-
Year	2021	2022	2023	2024	2025
Internet payments	7 821 346	9 048 125	15 351 354	19 594 482	27 123 648
	<b>11 176 475</b>	<b>18 151 104</b>	<b>32 196 672</b>	<b>51 945 560</b>	<b>145 069 271</b>
Payments on POS terminal	2 150 529	2 712 848	3 997 165	5 579 708	10 093 847
	<b>15 113 249</b>	<b>19 343 056</b>	<b>31 518 739</b>	<b>44 563 58</b>	<b>89 541 399</b>
ATM withdrawal	87 722 789	128 035 361	174 415 895	197 323 075	235 351 347
	<b>1 728 896 695</b>	<b>2 182 896 695</b>	<b>3 262 245 367</b>	<b>3 691 600 492</b>	<b>4 397 227 505</b>
Intra-bank mobile payment	-	-	39 283 478	58 465 858	69 390 626
	-	-	<b>27 855 521</b>	<b>43 590 424</b>	<b>57 302 081</b>
Intra-bank P2P transfer	-	-	17 841 108	36 236 137	47 523 335
	-	-	<b>241 073</b>	<b>503 679</b>	<b>647 425</b>

Source: author, compilation of the GUE Monétique reports 2016-2025, V1: volume, V2: value in KDA.

The COVID-19 health crisis accelerated online payments. The year 2020 shows a growing trend. The mandatory confinement of the population favored online orders. From the year 2022, several transactions contributed positively to increasing online payments, such as exclusive sales via online Bankcards of stadium tickets, payment of administrative fees such as registration fees for the BEM and BAC exams. The year 2025 recorded an expansion of online payments following the exclusive payments of AADL 3 rents.

In 2020, interoperability allowed “EDAHABIA” cards to make more payments, resulting in an increase in the number of transactions. On their side, POS terminals are increasingly integrated into daily behaviors, reflecting increased confidence in electronic payments. It should also be noted that withdrawal activity recorded sustained growth. Since 2020, driven by the densification of interbank ATMs and the increase in interbank cards put into circulation.

Regarding P2P transfers via mobile, 2024 saw a significant increase, recording more than double the volume of the previous year. This upward trend continued in 2025, confirming the gradual establishment of this payment method in Algeria. The development highlights the role of P2P mobile transfers as a major factor in the circulation of funds between individuals, supported by ease of use, mobility, speed, and reliability of the service.

**Table No. 4: annual evolution of payments by internet and by sector of activity**

Year	2021	2022	2023	2024	2025
<b>Telecom</b>	6 536	87 286	138 495	141 552	4 210 284
<b>Transport</b>	388	5 677	871	6 292	11 350
<b>Insurance</b>	51	2 467	6 439	8 342	4 845
<b>Billing</b>	391	12 414	29 722	38 806	85 676
<b>Administrative service</b>	-	-	1 455	2 432	68 395
<b>Service provider</b>	-	-	-	5 056	213 175

Year	2021	2022	2023	2024	2025
Sale of goods	-	-	-	-	235
Sports and leisure	-	-	-	-	-
Volume	7 366	107 844	176 982	202 480	4 593 960
Value	15 009	267 993	332 592	503 870	5 423 727
Year	2021	2022	2023	2024	2025
Telecom	6 993 135	7 490 626	8 400 869	9 838 682	12 243 812
Transport	72 164	195 490	371 317	758 764	1 271 387
Insurance	8 372	23 571	36 996	61 739	97 501
Billing	120 841	302 273	640 485	1 447 168	1 711 828
Administrative service	155 640	153 957	4 086 659	5 248 922	7 648 535
Service provider	457 726	705 114	1 055 672	1 386 790	3 358 841
Sale of goods	13 468	24 169	51 154	106 219	156 408
Sports and leisure	-	152 925	708 212	746 198	535 336
Volume	7 821 346	9 048 125	15 351 354	19 594 482	27 123 648
Value	11 176 475	18 151 104	32 196 672	51 945 560	145 069 271

Source: author, compilation of the GIE Monétique reports 2016-2025.

In 2020, online payment activity was heavily dominated by the “telecom” sector, which accounted for more than 92% of all transactions recorded during that year. Other sectors, such as billers, insurance, and transport, contributed only 6.5% combined.

**Table No. 5: evolution of internet payments by type of activity**

Year	Telecom	Transport	Insurance	Billing	Administrative Service	Service Provider	Sale of Goods	Sports and Leisure	Average Value
2020	92%	0,20%	0,10%	2%	1%	5%	0,01%	-	1 180,62
2021	89%	1%	0,10%	2%	2%	6%	0,20%	-	1 428,97
2022	83%	2%	0,30%	3%	2%	8%	0,30%	2%	2 006,06
2023	55%	2%	0,20%	4%	27%	7%	0,30%	5%	2 097,32
2024	50%	4%	0,30%	7%	27%	7%	1%	4%	2 651,03
2025	45%	5%	0,40%	7%	28%	12%	1%	2%	5 348,44

Source: author, compilation of the GIE Monétique reports 2016-2025.

The ‘Telecom’ sector decreased from 89% in 2021 to 45% in 2025 in favor of other services such as administrative services and service providers, which have begun to take a significant share of the activity. These factors thus mark the qualitative evolution recorded in online payment activity, a sign of increasingly positive adoption and trust in this payment method.

**Table No. 6: monthly evolution of payment and withdrawal operations**

Year 2025	Proximity Payment		Withdrawal	
	Volume	Value	Volume	Value
January	659 336	5 513 635	16 631 024	311 929 133
February	695 079	6 355 612	17 364 708	330 597 585
March	770 554	6 442 067	20 399 588	386 844 778
April	697 220	6 181 945	18 611 260	338 526 745
May	841 308	7 996 704	20 600 316	387 924 347
June	780 461	7 278 788	19 764 988	382 246 206
July	867 205	7 691 546	18 571 241	343 567 672
August	903 301	8 051 973	20 225 732	372 066 112
September	949 940	8 388 664	20 961 866	394 598 766
October	947 910	8 449 654	20 921 138	384 576 890
November	962 377	8 291 956	19 872 098	366 114 627
December	1 019 156	8 898 850	21 427 388	398 234 639
<b>Total</b>	<b>10 093 847</b>	<b>89 541 399</b>	<b>235 351 347</b>	<b>4 397 227 505</b>

Source: Author, GIE Monétique report, 2025.

The “proximity payment” activity in 2025 shows a seasonal variation. During the first semester, a peak in volume was recorded in May, mainly generated by the sheep sales operation on Eid al-Adha. During the second semester, the activity showed an upward trend, both in volume and in value. The month of December closes the year with a significant peak of 1,019,156 transactions, for a value of 8.90 billion dinars. Despite these achievements, the level of POS usage activity remains relatively low.

The analysis of the “withdrawal” activity for the year 2025 highlights a marked cyclical variation, both in volume and in value, reflecting the influence of seasonal factors and consumer behaviors. Significant peaks recorded in March and May coincide with religious holidays such as Ramadan, Eid al-Fitr, and Eid al-Adha, periods traditionally associated with an intensification of household spending. During the second half of the year, the same trend continues, particularly in August and September, both in volume and in value, marked by an increase in spending.

**Table No. 07: Evolution of the main E-payment activities in Algeria in 2025**

Year 2025	Number of Individual mobile accounts in service	Number of Merchant mobile accounts in service	Payment by QR-Code	P2P transfers between banks
March	6429	1129	174	780
April	13321	2193	349	1940
May	26136	4337	529	2930
June	35674	6254	761	3832
July	47016	8440	1151	4422
August	55508	8896	1291	4977
September	64752	9812	1491	5483
October	78212	11828	1831	6309
November	<b>88479</b>	<b>13401</b>	<b>2304</b>	<b>6509</b>
December	<b>95014</b>	<b>14283</b>	<b>2801</b>	<b>7187</b>

Source: Author, GIE Monétique report, 2025.

Intra-bank mobile payment was available in Algeria, notably through BaridiPay from Algérie Poste, as well as the applications of the National Bank of Algeria and EL SALAM BANK Algeria, which were the first to offer this service, limited only to their respective customers, as illustrated by the figures presented earlier. Interoperability, materialized by the commissioning of the national mobile switch since June 2024, followed by the deployment of mobile payment solutions interconnected through this switch, allowed for the expansion of the service's operational scope and gave a new dynamic to electronic payment activity. Interbank mobile payment in Algeria was officially launched in January 2025, "DZMobPay," and currently includes seven pilot banks, with plans to extend it to all other actors in the interbank sector.

#### **4. Recommendations**

##### **4.1. Strengthening the acceptance infrastructure and interoperability**

It is recommended to accelerate the deployment of POS terminals and the diversification of acceptance points. The priority targets should be local businesses, under-equipped rural areas, and informal markets in the process of formalization. Tax incentives and subsidies can be a very effective lever for small merchants, following the Tunisian experience. The extension of interoperability to all financial institutions, such as microfinance associations, is recommended. The creation of a common payment platform accessible to all actors in the Algerian financial system would multiply the network effects of e-payment.

##### **4.2. Reducing the informal economy through digital means and cashless**

A strategy to create tangible advantages for digital formalization is necessary. The fight against the informal economy, which involves More than a third of the money supply in circulation, should not be repressive. On the ground, it is recommended to use electronic payment from a certain amount for legal entities, encouraging the loyalty system for local electronic payments. In addition, it is recommended to promote Islamic finance, which has already experienced significant growth since 2022 in terms of deposits. This dynamic directly affects financial inclusion, particularly for populations who hesitate to enter the conventional banking system. In other words, the electronic promotion of Islamic finance products can significantly reduce informal cash.

##### **4.3. Development of a National Fintech Ecosystem**

Algeria has considerable Fintech potential, with more than 6,000 active startups in 2024. The creation of a regulatory Sandbox, modeled on the Central Bank of Egypt's Regulatory Sandbox, would allow local FinTechs to innovate within a secure framework while contributing to digital financial inclusion. The Algerian Startup Fund (ASF) could be mobilized more actively to finance innovative payment solutions targeting unbanked populations. The development of a universal digital identity, linked to the national civil registry, is an essential prerequisite for everyone's access to digital financial services.

##### **4.4. Financial and Digital Education**

Financial and digital education constitutes the indispensable foundation of any sustainable financial inclusion strategy. Available surveys reveal significant deficits in financial literacy in Algeria, particularly in rural areas and among women. A national program of financial and digital education, jointly supported by the Bank of Algeria, the Ministry of National Education, and mobile phone operators, would gradually help remove behavioral barriers to the adoption of e-payment.

#### **5. Conclusion**

This study analyzed the role of e-payment as a driver of digital financial inclusion in Algeria over the decade 2016-2025. The results, based on a rigorous analysis of GIE Monétique data, combined with a review of the literature, paint a nuanced picture of an ongoing transformation that is promising but still

incomplete. The progress is undeniable. The total amount of electronic transactions grumped. These achievements reflect a profound transformation of payment habits of a growing part of the Algerian population.

However, major structural challenges remain. The predominance of the informal economy, the low density of payment terminals, the banking rate, and territorial and gender digital inequalities are persistent obstacles that limit the scope and depth of digital financial inclusion. The electronic payments/withdrawals ratio of 2024 reveals that a cash culture remains deeply rooted in daily economic practices. The recommendations made in this study constitute a coherent public policy agenda to accelerate the transition toward broader and deeper digital financial inclusion.

The implementation of these recommendations within a framework of partnership governance between the Bank of Algeria, the GIE Monétique, commercial banks, Algeria Post, and FinTechs is an essential condition for success. This research opens up perspectives for future investigations. Quantitative studies on the impact of e-payment on the well-being of low-income households. Ultimately, Algerian e-payment is at a strategic turning point. The momentum provided by major mandated digital payment operations has demonstrated the potential of regulatory constraint as a lever for adoption. It now falls to public decision-makers and private actors to build on this foundation a digital financial inclusion that is inclusive, sustainable, and fair, capable of supporting the economic and social development of Algeria in the future.

## 6. References

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