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Digital marketing and communication technology – Analytical reading of the Algerian Internet Market Observatory report for the second quarter of 2025

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Abstract :

Since 2001, Algeria has pursued a policy of openness and reform to develop the telecommunications sector, leading to noticeable qualitative progress. Nevertheless, the country continues to experience delays in the advancement of information and communication technologies. This paper analyzes the current state of the sector through an analytical reading of the Algerian Internet Market Observatory report for the second quarter of 2025. The internet has become the primary engine of growth, largely surpassing fixed telephony, with mobile internet representing about 88.71% of subscribers and a strong transition toward fourth-generation technology. These changes have positively affected infrastructure through the expansion of fiber-optic networks and increased international bandwidth capacity. As a result, Algeria has improved its global standing, reaching 74th place in the ICT Development Index. This progress supports digital marketing and business activities, although persistent challenges remain, particularly in ensuring service continuity and enhancing connection speed and quality nationwide for all.

Keywords:

Information and communication technology; Algérie Telecom; mobile phone; internet.

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1. INTRODUCTION:

The telecommunications and information technology sector in Algeria is considered one of the most prominent engines of economic and social development in the modern era. The market has undergone a radical transformation driven by the massive expansion of internet penetration, especially via mobile phone. In light of this transformation, digital marketing has emerged as an inevitable tool for institutions wishing to survive and compete, leveraging the direct interaction provided by modern communication networks. This study aims to provide an in-depth analytical reading of the Algerian Internet Market Observatory report, issued by official bodies, to explore the main dimensions of subscriber base growth and their usage patterns. By analyzing this data, we seek to evaluate the reality of the communication environment and its direct impact on digital marketing practices in the country, and to identify the opportunities and challenges facing economic actors in achieving an effective digital transformation.

Accordingly, this paper attempts to answer the main question:

How does communication technology contribute to improving digital marketing activity in Algeria?

We will attempt to answer this problematic through studying the following axes:

- The essence of digital marketing and its current reality.
- The essence of communication technology and its importance within the context of digital marketing.
- An analytical reading of the Algerian Internet Market Observatory report for the second quarter of 2025.

1.1. Importance of the Study:

The importance of this study lies in the fact that it constitutes a necessary analytical database for evaluating the extent of internet penetration in Algeria and guiding digital marketing and communication technology strategies. It allows companies to identify the most effective channels for reaching the audience, considering the overwhelming dominance of mobile internet, which necessitates focusing marketing efforts on mobile platforms and social media. The study also contributes to guiding investment decisions and developing digital products and services in line with market growth trends and Algerian consumer preferences. Furthermore, the analytical reading helps in monitoring the strengths and weaknesses in the communication infrastructure and identifying the challenges that hinder comprehensive digital transformation.

1.2. Objectives of the Study:

The objectives of the study "Digital Marketing and Communication Technology – Analytical Reading of the Algerian Internet Market Observatory Report" are:

- Analyzing the reality of the internet market: Determining the size and evolution of the internet subscriber base in Algeria, distinguishing between access types

(mobile and fixed), to estimate the extent of communication technology penetration.

- Evaluating the digital marketing environment: Understanding the nature of the Algerian digital environment, including the most used channels and the indicators that digital marketers should focus on to ensure effective reach.
- Proposing appropriate marketing strategies: Providing institutions with practical recommendations for developing their digital marketing strategies in line with market data and mobile and fixed subscription growth rates.
- Monitoring challenges and investment opportunities: Identifying gaps and weaknesses in internet services (such as quality and flow), while simultaneously revealing new investment opportunities resulting from increasing digital transformation.
- Supporting Decision Making: Providing reliable and analyzed data and statistics to decision-makers in the public and private sectors, to support economic development efforts and the transition towards a digital economy.

1.3. Study Methodology:

In this study, we followed the descriptive analytical approach by utilizing books, previous studies, scientific conferences, various published articles, electronic references, and official reports that addressed the topic by describing the study variables and finding the links between them within the framework of the study.

2. The Essence of Digital Marketing:

Digital marketing is defined as a projection of traditional marketing, its tools, and strategies onto the internet. However, the specific characteristics of the digital world and its dedication to marketing have fostered the development of channels, forms, and languages that have led to tools and strategies unimaginable outside the internet (Aliet & Maazouzi, 2022, p. 303). Therefore, electronic marketing is one of the new and innovative concepts in the world of marketing, and it is noted that the concept of electronic marketing is somewhat ambiguous even in marketing literature. This is due to the belief that marketing is only done through the internet (Al-Tai et al., 2005, p. 342).

It is also defined as the use of technology and the internet to achieve benefits that can be realized for the consumer by learning about products through electronic means and the speed of product arrival from anywhere in the world. It is a means of reducing effort, time, and cost for the customer. Electronic marketing is one of the contemporary methods of bridging communication between the seller and the buyer to market goods and services over the internet (Aliet & Maazouzi, 2022, pp. 303-304). It reduces the cost of obtaining knowledge, unlike a person who intends a specific place that may be very far from the area to obtain the service, as electronic marketing breaks geographical distances. It also reduces time and effort and is also concerned with distributing messages at a low cost, for example, through email (Al-Zaarir & Al-Talib, 2019, p. 58).

3. Digital Marketing Tools:

Digital marketing is carried out through:

- Email Marketing: Email marketing technology is considered one of the latest

methods of internet marketing, where you can stay in touch with customers and provide them with everything useful and interesting about the services and goods offered through your site, and thus you can achieve sales and gain more profits. If you want to attract the largest possible number of customers via their email, you can advertise your product on commercial sites that attract a wide range of visitors for the purpose of internet marketing, such as Amazon, eBay (IB), and other sites, by adding the application "Send your email to get more discounts on product prices" (Falah Mufleh Al-Zoubi & Saleh Al-Nasr, 2020, p. 45).

- Social Media Marketing: It is a form of internet marketing that involves creating and sharing content on social networks to achieve marketing goals, sell and promote products using social channels, and achieve marketing objectives by introducing the brand and building an active customer base. Through this, you can sell the products you offer, in addition to knowing customer opinions on the products and studying their aspirations and benefiting from them, which creates loyal customers for the brand, and thus achieves higher sales (Al-Ababneh, 2024, p. 89).
- Content Marketing: It is the management of all types of content that you create, whether written, visual, or audio. It is a strategic approach that focuses on creating and distributing useful content to the audience in order to increase their loyalty, gain trust, and convert them into customers. Content marketing provides a solution to a number of tasks specific to organizations' operations that ensure the achievement of strategic goals, increased share of the target audience, increased loyalty and brand awareness, in addition to improving the organization's resources (Al-Ababneh, 2024, p. 61). It is said that "Content Is King" , and this is due to its importance in delivering your successful marketing message. Content marketing may differ from the information provided by companies. When a company gives you a lot of information about the features of its product and that it is the best, that information will not add actual value to you, as content marketing fundamentally relies on adding real value and information to the customer (Watoura & Blirdouh, 2022, p. 61).

4. Importance of Communication Technology:

Technology is referred to as "the processes, techniques, machines, and activities used to transform inputs (materials, information, and ideas) into outputs (products and services)" (Al-Sayrafi, 2009, p. 13). It is defined as "the art of executing, within an internal framework and for a specific goal, all the sciences, techniques, and basic rules involved in product design, management methods, and information systems" (Qasim Dawood Al-Lami, 2007, p. 23) , and it is "a set of knowledge, expertise, skills, and experiences necessary to manufacture a specific product or products" (Massin, 2001, p. 83).

From the previously mentioned definitions, we conclude that technology "is a set of new ideas and information employed to obtain products and services".

Technology plays a vital role in various organizations for its contributions to achieving outstanding performance and improving and enhancing their competitive positions. Technology has achieved several benefits for a large number of institutions, according to (Qasim Dawood Al-Lami, 2007, p. 42), including:

- Reducing direct labor costs.
- Increasing sales.
- Technology's great contribution to improving quality.
- Improving environmental conditions, as modern technology contributed to eliminating noise by reducing the need for sound protection tools, as well as significantly reducing environmental pollution rates.
- Helps achieve a competitive advantage, as well as maintaining survival and continuity.
- Highlighted the importance of technology in several factors: technological innovation and the nature of global competition, by shifting from mass production to production according to customer requests, which requires reliance on highly flexible production systems that help in providing distinguished products (Kaooja, 2013, p. 7).
- Helps in speed of performance, reducing costs, and maintaining high quality in the goods and services provided (Al-Lawzari, 2007, p. 148).

5. Reality of Communication Technology in Algeria:

The internet penetration has grown at a higher rate than telephone penetration according to the indicators of the telecommunications services sector in Algeria during the period (2010-2022). The following table shows this:

Table N°01: Communication Technology in Algeria

Indicators	Telephone Penetration	Internet Penetration
	Subscription Evolution	Subscription Evolution
Arithmetic Mean	3.65	81.32
Standard Deviation	3.45	172.46

Source: Boussahoua, 2023, p. 117

We observe from the table above that the arithmetic mean for the evolution of internet penetration subscription reached (81.32), which is higher than the arithmetic mean for the evolution of telephone penetration subscription, which reached (3.65). This indicates that internet penetration is evolving at a higher rate than telephone penetration. As for the standard deviation for the evolution of internet penetration subscription, it was large, reaching (172.46), which indicates a large dispersion and variation among the values, in contrast to the standard deviation for the evolution of telephone penetration subscription, which reached (3.45), indicating that the values are close to the arithmetic mean.

6. Communication Technology Sector in Algeria:

Activities practiced in this field fall within the framework of various operating regimes stipulated in the legislation and regulations in force, namely: the General Authorization regime, the Licensing regime, and the Ordinary Declaration regime.

Regarding fixed telephony, the state entrusted the operation and development of national electronic communications transmission networks to Algérie Telecom, a subsidiary of the Télécom Algérie Group. The mobile phone market consists of three operators: Mobilis (a subsidiary of the Télécom Algérie Group), Djezzy, and Ooredoo.

The Algerian state adopted the development of Information and Communication Technologies (ICT) at the heart of its economic and social development strategies and

policies. Thus, in terms of its achievements and use of new technologies, Algeria was ranked the third "most dynamic" in the world by the International Telecommunication Union (ITU), the highest telecommunications authority in the world, and was classified among the countries that made "significant progress" in the field of ICT development.
Strategic development work began in 2009 by improving the traditional copper network and introducing MSAN networks for fixed networks. Algeria also resorted to other types of technologies with similar efficiency to make up for the delay it faced regarding the introduction of ICT. Among these technologies are the deployment of 3G since December 2013 and 4G since September 2016. Starting in 2018, the Ministry in charge of ICT set an ambitious program, specifically targeting the generalization of Fibre to the Home (FTTH) usage across the national territory and the building of the information society. This program allowed, as a first step, the reinforcement of the national fibre transmission network to reach more than 200,000 kilometers in use. The modernization process also affected the international transmission network through the new cables (Orval / Alval), which led to an increase in bandwidth capacity from 2.8 Terabytes per second (Tbps) to 7.8 Tbps, expandable to over 32 Tbps.

7. Evolution of the Telecommunications Sector Turnover in Algeria:

The annual report of the Post and Electronic Communications Regulatory Authority revealed that the electronic communications sector in Algeria achieved satisfactory economic figures in 2020, with more than 85 billion DZD in investments, a turnover of 404.42 billion DZD, and 32,958 jobs, according to the Algerian News Agency.
Regarding fixed telephony, the turnover doubled in 10 years, rising from 61 billion DZD in 2010 to 113 billion DZD in 2020. As for mobile telephony, the turnover experienced a continuous rise between 2010 (222.58 billion DZD) and 2016 (149.00 billion DZD), then gradually decreased, reaching 279.51 billion DZD in 2020.
Operators subject to the licensing regime achieved a turnover estimated at 6.68 billion DZD in 2020, compared to 8.01 billion DZD in 2019, a decrease of 16.60 percent. For their part, operators with a VSAT license achieved a turnover estimated at 4.19 billion DZD in 2020, compared to 4.26 billion DZD in 2019, a decrease of approximately 1.70 percent. During the same period, operators with a GMPCS license achieved a turnover estimated at 0.50 billion DZD in 2020, compared to 8.01 billion DZD in 2019, a decrease of 16.60 percent.
Regarding jobs, the number of employees of operators and service providers working in the electronic communications sector reached 32,958 employees (Achour, 2025).

8. The Internet in Algeria:

According to the Algerian Internet Market Observatory report, most of the indicators related to this technology have followed an upward trend over the past years, which can be attributed to the development in communication equipment, technologies, and electronics. Considering the distribution of the total internet park, it can be shown according to the following table:

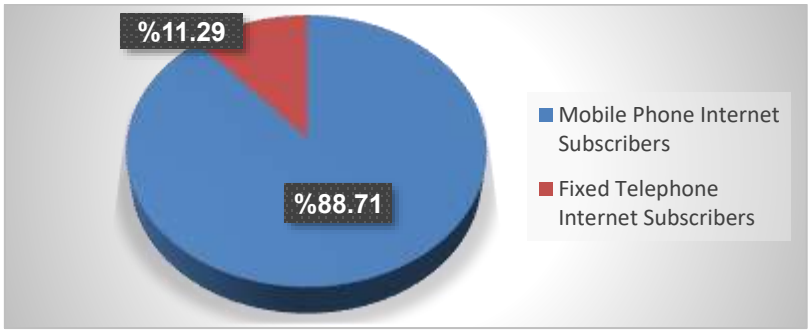
Table N°02: Distribution of the Total Internet Park in Algeria for the Second Quarter of 2025

	Second Quarter 2025
Fixed Telephone Internet Subscribers	6,674,365
Mobile Phone Internet Subscribers	52,423,759
Total Internet Subscriber Park	**59,098,124**

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

It can be represented according to the following figure:

Figure N°01: Distribution of the Total Internet Subscriber Park in Algeria for the Second Quarter of 2025 (by Access Type)

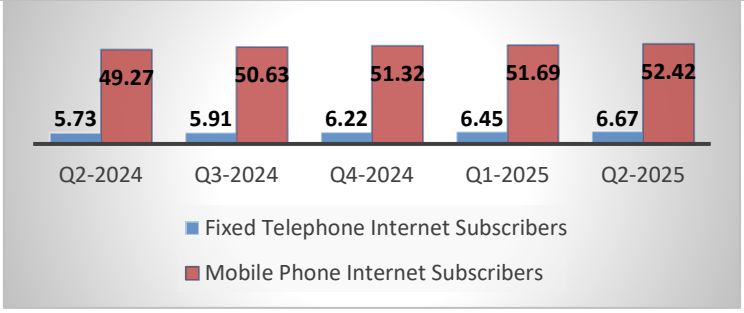


Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

We note that the proportion of mobile phone internet service represents a large percentage of the total internet park, close to 88.71% of the total subscribers. This is due to the development in wireless communication technology, especially the expansion of the Fourth Generation (G4) network and network coverage, in addition to the availability of mobile phones at affordable prices for various price categories and the competitiveness of various mobile operators in Algerian society. The following figure illustrates the graph of the evolution of the internet subscriber park by access type from the Second Quarter 2024 / Second Quarter 2025.

Figure N°02: Evoltion of the Internet Subscriber Park by Access Type from the Second Quarter 2024 / Second Quarter 2025 (in Millions)

	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025
Fixed Telephone Internet Subscribers	5.73	5.91	6.22	6.45	6.67
Mobile Phone Internet Subscribers	49.27	50.63	51.32	51.69	52.42



Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

The table shows the evolution of internet subscribers in a country over five quarters (from Q2 2024 to Q2 2025), divided into two main categories: Mobile Phone and Fixed Telephone.

- **Mobile Phone Dominance:** Mobile phone internet subscribers constitute the vast and dominant majority of the subscriber base, exceeding 52 million subscribers in Q2 2025, while fixed telephone subscribers reached only 6.67 million.
- **Continuous Growth:** Both types of subscriptions are experiencing continuous growth during the period shown. Mobile phone subscribers increased from 49.27 million to 52.42 million. Fixed telephone subscribers increased from 5.73 million to 6.67 million.
- **Wide Gap:** Despite the growth in both sectors, the largest absolute growth was for mobile phone internet, confirming the increasing reliance on internet access via mobile devices.

Fixed Telephone Internet Market:

The internet density is represented in the following table:

Table N°03: Total Fixed Internet Subscriber Park in Algeria (Second Quarter)

Subscriber Type	Number of Subscribers
ADSL Subscribers	2,418,926
Fixed 4G LTE Internet Subscribers	2,000,026
FTTH Fibre Internet Subscribers	2,251,203
LS Internet Subscribers	4,210
Total Fixed Internet Subscribers	**6,674,365**

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

This can be represented in the following figure:

Figure No. (03): Internet Density in Algeria



Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

The attached table shows the evolution of the number of internet subscribers in a country over five quarters, from the second quarter of 2024 to the second quarter of 2025, and divides subscribers into two main categories: mobile phone internet and fixed telephone internet. Mobile phone subscriptions overwhelmingly dominate the subscriber base, exceeding 52 million subscribers at the end of the period, while fixed telephone subscriptions reached only 6.67 million. However, both types are experiencing continuous growth during the year, reflecting the increasing spread of internet services in general, driven by the growing reliance on mobile device access.

The flow value provided by Algérie Telecom through the fixed telephone internet service ranges between a minimum of 10 Megabytes (Mb) to more than 100 Mb. The largest percentage of subscribers have subscriptions ranging from 10 to 20 Mb, which is due to the fact that most subscribers use home internet for ordinary purposes such as education and following social media and news, in addition to the fact that their subscription prices are affordable for most segments of society. The following table shows this:

Table N°04: Distribution of Subscribers Park by Flow Value (ADSL/Fibre/LS)

Flow Value	Second Quarter 2025
10 Mbps ≤ Flow < 20 Mbps	60.30%
20 Mbps ≤ Flow < 50 Mbps	27.08%
50 Mbps ≤ Flow < 100 Mbps	3.52%
100 Mbps ≤ Flow < 500 Mbps	7.59%
≥ 500 Mbps	**1.51%**

Source: Algérie Telecom

9. Total Consumed Data Traffic Volume:

The volume of consumed data traffic is represented in the following table:

Table N°05: Total Consumed Data Traffic Volume (in Billion GO)

	Q1-2025	Q2-2025
ADSL / LS Subscribers	1,586	1,581
Fixed 4G LTE Subscribers	238	253
FTTH Subscribers	1,160	1,457
Total Consumed Traffic	**2,984**	**3,291**
Evolution Rate	**+ 10.29%**	

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

It is clear from the table above that the evolution rate in the volume of consumed data has witnessed a significant increase between the first quarter of 2025 and the second quarter of the same year. This can be interpreted by the steady increase in the number of subscribers resulting from promotional offers launched by Algérie Telecom, as well as the expansion of the residential park in the country, which led to new subscriptions and consequently an increase in data consumption.

10. Mobile Phone Internet Market in Algeria:

The mobile phone is the essential tool for instant communication and access to digital information and services, facilitating the daily lives of citizens in the areas of work, education, financial, and administrative transactions.

Table N°06: Distribution of Mobile Phone Subscriber Park by Technology Type

	Q1-2025	Q2-2025
3G Mobile Internet Users	1,876,385	1,848,150
Evolution Rate	**- 1.5%**	
4G Mobile Internet Users	38,398,930	39,883,953
Evolution Rate	**+ 3.87%**	
Total 3G/4G Users	**40,275,315**	**41,732,103**
Evolution Rate	**+ 3.62%**	

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

The subscriber park for internet service in Algeria consists of 52,423,759 active subscribers across different access technologies, whether 3G or 4G. With the increasing number of 4G antennas, the number of subscribers to this technology has seen a significant increase.

We observe from the table above that the percentage of 3G mobile internet subscribers decreases from one year to the next as a result of subscribers abandoning this technology due to poor flow and moving towards the more advanced technology, which is 4G. This explains the increase in the percentage of 4G subscribers, and the general trend for the number of mobile phone internet service subscribers is continuously increasing.

11. Evolution of the Internet Market in Algeria:

The International Telecommunication Union's classification related to the Information and Communication Technology Development Index (IDI), in its latest edition issued at the end of June 2025, indicated that Algeria ranked 74th globally, achieving a progress of 15 ranks compared to the previous year's classification where it ranked 89th.

According to the same assessment, by recording a total of 86.1 points, Algeria exceeds the global average for the ICT Development Index, which is 78 points, the Arab region average of 77.6 points, and the African countries average estimated at 56.1 points, as well as the average for the upper middle-income countries group estimated at 81.1 points.

It should be noted that the ICT Development Index, issued by the ITU, is the most important indicator for measuring and evaluating the level of ICT development in the world's countries107. It is based on a set of sub-indicators, within two main axes: Universal Connectivity (the extent of connectivity of households and individuals to the internet), and Meaningful Connectivity related to the useful use of the internet in various fields and at an affordable cost (Ministry of Post and Telecommunications, 2025).

This progress reflects the results achieved by Algeria, in line with the insightful vision of the President of the Republic, in the field of generalizing ICT across its vast territory, and making it accessible to all its citizens regardless of their place of residence.

Table N°07: Evolution of the Internet Market in Algeria (in Millions)

	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025
Total Park	54.99	56.54	57.54	58.14	59.10
Evolution Rate (Q2-2024 / Q2-2025)				**+ 7.47%**	

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

The following table shows the evolution of peak consumption in Algeria from Q2 2024 / Q2 2025:

Table N°08: Evolution of Peak Consumption (Gbps)

	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025
Peak Consumption (Gbps)	4,480	4,130	4,330	4,710	5,390

Source: Algérie Telecom

The following table shows the evolution of the fixed phone internet park in millions in Algeria from Q2 2024 / Q2 2025:

Table N°09: Evolution of the Fixed Phone Internet Park (in Millions)

	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025
Fixed Internet Park	5.73	5.91	6.22	6.45	6.67
Evolution Rate (Q2-2024 / Q2-2025)				**+ 16.40%**	

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

The following table shows the evolution of the total fixed consumer data traffic volume in Algeria from Q2 2024 / Q2 2025:

Table N°10: Evolution of the Total Fixed Consumer Data Traffic Volume (in Billion GO)

	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025
Total Consumed Fixed Data Traffic Volume	2,706	2,728	2,734	2,984	3,291
Evolution Rate (Q2-2024 / Q2-2025)				**+ 21.62%**	

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

The following table shows the evolution of the mobile phone internet market in Algeria from Q2 2024 / Q2 2025:

Table N°11: Evolution of the Mobile Phone Internet Market (in Millions)

	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025
Mobile Internet Subscriber Park	49.27	50.63	51.32	51.69	52.42
Evolution Rate (Q2-2024 / Q2-2025)				**+ 6.39%**	

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

The following table shows the evolution of the total consumed mobile data traffic volume in Algeria from Q2 2024 / Q2 2025:

Table N°12: Evolution of the Total Consumed Mobile Data Traffic Volume (in Billion GO)

	Q2-2024	Q3-2024	Q4-2024	Q1-2025	Q2-2025
Total Consumed Mobile Data Traffic Volume	1,221.91	1,323.85	1,343.85	1,366.89	1,489.14
Evolution Rate (Q2-2024 / Q2-2025)				**+ 21.87%**	

Source: Algerian Internet Market Observatory Report for the Second Quarter, 2025

It is clear from the tables above that the overall indicators of internet use, both in terms of the number of subscribers and the volume of data consumption, are continuously increasing. This is a good indicator that explains the classification reached by Algeria through the IDI index, which is based on a set of weighting ratios that primarily include access to ICT, especially the number of fixed and mobile phone subscriptions and the percentage of individuals who use the internet.

12. Contribution of Communication Technology to Improving Digital Marketing Performance in Algeria:

Communication technology plays an important role in improving digital marketing performance by reaching a wide audience, providing marketing cost savings, and increasing the effectiveness of advertising campaigns. With the increasing use of the internet and smartphones in Algeria, companies can enhance their digital marketing strategies and expand into e-commerce. Despite the challenges related to infrastructure, continuous government initiatives aim to enhance this field, which opens up greater opportunities for companies to benefit from the digital transformation in marketing. A set of key points highlights how Algerian companies and institutions benefit from the internet and modern technologies in promoting and developing digital marketing strategies:

- Communication technology enables access to a wider audience that transcends traditional geographical boundaries. With the spread of internet access via mobile phones, companies can target consumers in rural and urban areas alike.
- There are more than 70% of Algerians using the internet (Digital Marketing in Algeria, 2025), which constitutes a great opportunity for companies to reach a wide segment of consumers through digital marketing.
- Social media is a powerful platform for direct communication with the audience, allowing companies to interact directly with their customers, answer their inquiries, and involve them in marketing campaigns. It provides an opportunity to enhance the customer experience and build brand loyalty, especially with the growing use of these platforms by Algerians.
- Digital marketing through the internet is characterized by being less costly compared to traditional marketing (such as television, radio, or newspaper advertisements). This provides a great opportunity for small and medium-sized enterprises (SMEs) in Algeria to compete with large companies using limited marketing budgets. It allows them to

create websites, launch email marketing campaigns, and social media advertisements with relatively low budgets.

- Companies in Algeria can analyze the effectiveness of their marketing campaigns and understand how consumers interact with their products and services. This analysis enables companies to adjust and improve their marketing strategies based on real data, which increases the efficiency and success of campaigns.
- Despite the rapid growth in internet use in Algeria, some challenges still exist, such as problems with connection speed and internet outages in some areas, which may negatively affect user experience. However, there are efforts from the Algerian government to improve the digital infrastructure and support the digital transformation. In this regard, several government initiatives and supportive legislation have been launched to promote digital transformation through initiatives to develop and stimulate innovation in the field of technology and e-commerce. For example, there are plans to improve internet quality and increase the number of users in rural areas.

13. CONCLUSION:

The analysis confirmed that the internet market in Algeria is undergoing a rapid transformation led by the absolute dominance of mobile phone internet, which establishes its role as a fertile and necessary ground for digital marketing. This continuous growth requires institutions to adopt digital marketing strategies focused on mobile content and smartphone user experience. Recommendations revolve around improving service quality and developing infrastructure, with the necessity of effectively using the Observatory's data to deepen the understanding of consumer behavior. Future success lies in tightly integrating communication indicators with marketing strategies to support the transition towards a digital economy.

13.1. Study Results:

The results of the study are:

- ✓ **Dominance and Evolution of the Internet over the Telephone:**
  - **Faster Internet Evolution:** The evolution of the internet park subscription (with an arithmetic mean of 81.32) recorded a significantly higher rate than the evolution of the telephone park subscription (with an arithmetic mean of 3.65) during the period (2010-2022), indicating that the internet is the main driver of growth in the communication sector.
  - **Dispersion of Internet Growth:** The large standard deviation for the evolution of internet subscription (172.46) indicates a significant dispersion and variation in annual growth rates, unlike the telephone subscription growth which was more consistent and stable (standard deviation of 3.45).
- ✓ **Supremacy of Mobile Internet and Community Reliance on It:**
  - **Absolute Dominance of Mobile Internet:** Mobile phone internet service represents the vast majority of the total subscriber park, with its proportion reaching about 88.71% of total subscribers in the second quarter of 2025.
  - **Increased Reliance on Fourth Generation (G4):** The number of Fourth Generation (G4) subscribers is witnessing a significant increase at the expense of Third Generation (G3), whose number of subscribers is gradually decreasing due to poor flow.

- **Continuous Growth in Subscriber Base:** Both mobile phone internet (exceeding 52 million subscribers in Q2 2025) and fixed internet (reaching 6.67 million subscribers) show continuous growth, reflecting the increasing spread of internet services in general.

✓ **Infrastructure Improvement and International Status - A Leap in Global Ranking:**

- Algeria achieved significant progress in the ICT Development Index (IDI) issued by the International Telecommunication Union (ITU), ranking 74th globally in the latest edition (as of June 2025), a progress of 15 ranks from the previous year, surpassing global, Arab, and African averages.
- **Development of Fibre Optic Infrastructure:** The national fibre transmission network was reinforced to reach over 200,000 kilometers, and the international bandwidth capacity was increased via new cables (Orval / Alval) from 2.8 Tbps to 7.8 Tbps (expandable to over 32 Tbps).
- **Increasing Data Traffic Volume:** The total consumed data traffic volume is witnessing a significant increase, attributed to the steady rise in the number of subscribers and promotional offers.

✓ **Economic Status of the Sector - Satisfactory Economic Figures (2020):**

- The electronic communications sector achieved investments of more than 85 billion DZD, a turnover of 404.42 billion DZD, and provided 32,958 jobs in 2020.
- **Growth in Fixed Telephony Turnover:** Fixed telephony turnover doubled in 10 years, rising from 61 billion DZD in 2010 to 113 billion DZD in 2020.
- **Decline in Turnover for Some Operators:** The turnover of operators subject to the licensing regime, VSAT operators, and GMPCS operators witnessed a decline in 2020 compared to 2019.

✓ **Role of Communication Technology in Digital Marketing - Improving Digital Marketing Performance:**

- Communication technology plays an important role in improving digital marketing performance through:
  - **Reaching a wide audience:** Companies benefit from the internet usage rate, which exceeds 70% of Algerians.
  - **Low Cost:** Digital marketing is much less expensive than traditional marketing, which provides an opportunity for SMEs to compete.
  - **Effectiveness Analysis:** The possibility of using digital analysis tools to understand consumer behavior and improve marketing campaigns.
- **Existing Challenges:** Despite the growth, there are still challenges related to problems with connection speed and internet outages in some areas.

13.2. Recommendations:

The recommendations are:

- **Accelerating Fibre to the Home (FTTH):** Intensifying the deployment of fibre optics to homes to increase speed.
- **Stabilizing Growth:** Developing strategies to reduce the fluctuation of internet subscription growth.
- **Expanding 4G/5G:** Accelerating the transition to G4 and starting planning for 5G.
- **Increasing International Capacity:** Continuing to raise the international bandwidth capacity for data.
- **Digitally Supporting Small and Medium Enterprises (SMEs):** Providing affordable internet offers for SMEs.

- **Addressing Outages:** Solving problems of outages and connection speed in weak areas.
- **Motivating Operators:** Reviewing the reasons for the decline in the turnover of specialized operators (VSAT, GMPCS).

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