GSMA

The Digital Platform Economy Landscape in Tunisia

GSMA

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Mobile Innovation Hub

The GSMA Mobile Innovation Hub in Tunis was implemented by GSMA and the Digital Transformation Center of the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in Tunisia. It is supported by the Special Initiative Decent Work for a Just Transition – "Invest for Jobs" mandated by the German Federal Ministry for Economic Cooperation and Development (BMZ) and works in close collaboration with the local government and the local digital ecosystem.

Aim of the Mobile Innovation Hub is to foster mobile solutions and innovative business models around mobile solutions across various sectors in Tunisia. The Mobile Innovation Hub wants to create an impact by helping the ecosystem to thrive and ideally create new businesses and job opportunities in the growing digital sector of Tunisia.

The GSMA Mobile Innovation Hub provides knowledge around mobile technologies, assistance through trainings, collaboration opportunities and with the development of new solutions.

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DIGITAL TRANSFORMATION CENTER TUNISIA

This report is supported by the Special Initiative Decent Work for a Just Transition – "Invest for Jobs" mandated by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented at the Digital Transformation Center of the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Published: April 2024

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1. Executive summary

The digital platform economy refers to business models that leverage digital technologies to enable connections, matchmaking and the exchange between supply and demand, while facilitating economic and social value. The digital platform economy relies on a large and constantly expanding user network to enable interactions among several groups (usually consumers and producers). It is also characterised by its capability to grow rapidly at reduced costs as the means of connection are established.

As with many emerging economies, data on the topic is scarce. Proxy data suggests that the digital platform economy is at a nascent stage in Tunisia. All sectors have seen the rise in the digital platform economy, although the degree of adoption varies widely. The digital platform economy in Tunisia holds substantial promise for the country, as exemplified by its ability to generate job opportunities, unlock income potential, and enhance supply chain efficiencies, empowering micro-entrepreneurs and streamlining last-mile delivery operations, thereby promoting socio-economic advancement and sustainable growth.

While readiness is in some respects high—for example, good mobile internet infrastructure, high mobile penetration, enabling policies (e.g., the Tunisia National Digital Strategy 2021-25) and a digitally-skilled youth population—there are also several challenges. These include unadapted infrastructure—especially around mobile payments and logistics—and a lack of policies, especially in regard to the risk of the informal workforce operating in the digital platform economy.

Realising this opportunity will require a concerted dialogue from a wide range of stakeholders, especially to develop and implement best practices to improve working conditions for platform workers, such as blue-collar ones. Actionable recommendations for several groups are outlined in this report.

2. Research objectives

2.1 Research objectives

Through the Tunisia Mobile Innovation Hub, the **GSMA** and the **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH** supported by the Special Initiative "Invest for Jobs" by the **German Federal Ministry for Economic Cooperation and Development (BMZ)** have partnered to stimulate the digital platform economy as a new business model across relevant sectors in Tunisia, connecting supply with demand and in doing so, aiming to create more, decent and fair employment opportunities and formalise the informal economy.

This report:

- Explores the emergence of the digital platform economy model in low and middle-income countries (LMICs), including its benefits, risks and enablers.
- Provides an overview of the maturity of the digital platform economy landscape in Tunisia and how the Tunisia National Strategy 2021-25 supports the development of this model.
- Suggests actionable recommendations for stakeholders in Tunisia to further accelerate the development of the digital platform economy in Tunisia.

2.2 Methodology

The findings of this report are based on four main sources of information:

- **Fifty key informant interviews** (KIIs) with stakeholders of the Tunisian digital platform economy ecosystem (start-ups, investors, universities, mobile network operators, business associations, government bodies, associations and foundations, etc.) conducted between June 2021 and July 2022.
- **Desk-based research** on the digital platform economy in Tunisia and in LMICs.
- **Analysis of the Smart Capital** database.[1]
- Insights from the GSMA-led Platforms for Tomorrow (P4T) programme.

1. Smart Capital is the national Tunisian operator of the Startup Act and in charge of its implementation.

3. The rise of the digital platform economy in emerging economies

3.1 Defining platform economy

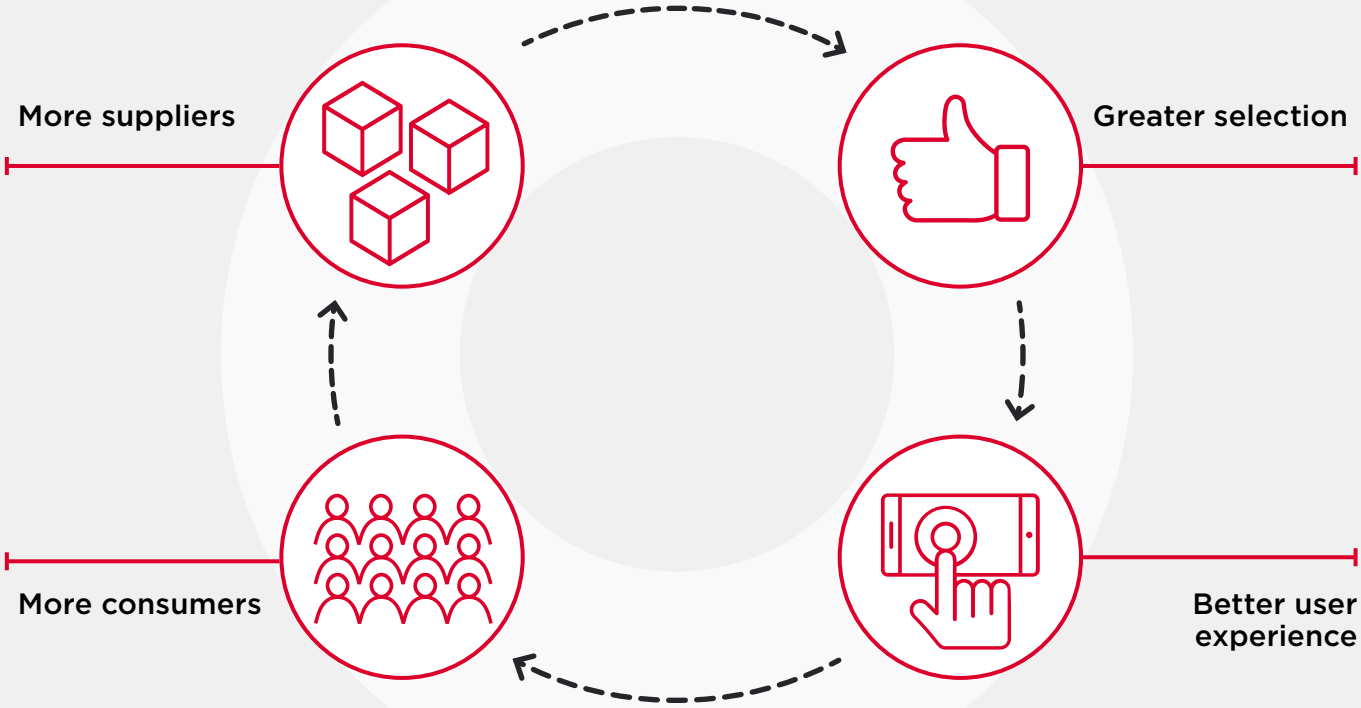
The definition of the platform economy[2] varies across different industries and areas of expertise and therefore there is no consensus on its classification. For the purpose of this report, the platform economy model is defined as:

> "Business models that leverage digital technologies to enable connections, matchmaking, and the exchange of supply and demand while facilitating economic and social value."

The platform economy model relies on a constantly expanding large user network. This phenomenon, known as **a network effect** (Figure 1), is one of its key characteristics and the way in which the model drives value. The more users there are on a platform, the more they benefit from joining the platform, creating a reinforcing cycle of growth.[3] For example, as more doctors join a digital platform offering medical advice, more patients will be attracted to use the platform because of the greater availability of doctors (which in turn drives users' growth). The platform economy model is necessarily digital (hence referred to as digital platform economy in this report) as it would not be able to create scale at speed without digital technology, infrastructure and tools.[4]

2. Platform encompasses the terms "platform business" "digital platform economy" "online platform economy" and "platform business-model."
3. Evans, P.C. & Gawer, A. (2016). The Rise of the Platform Enterprise, The Emerging Platform Economy Series No. 1. *The Center for Global Enterprise.*
4. Kenney, M. & Zysman, J. (2016). The Rise of the Platform Economy. *Issues in Science and Technology 32, no. 3.*

Figure 1
The virtuous cycle of network effects[5]



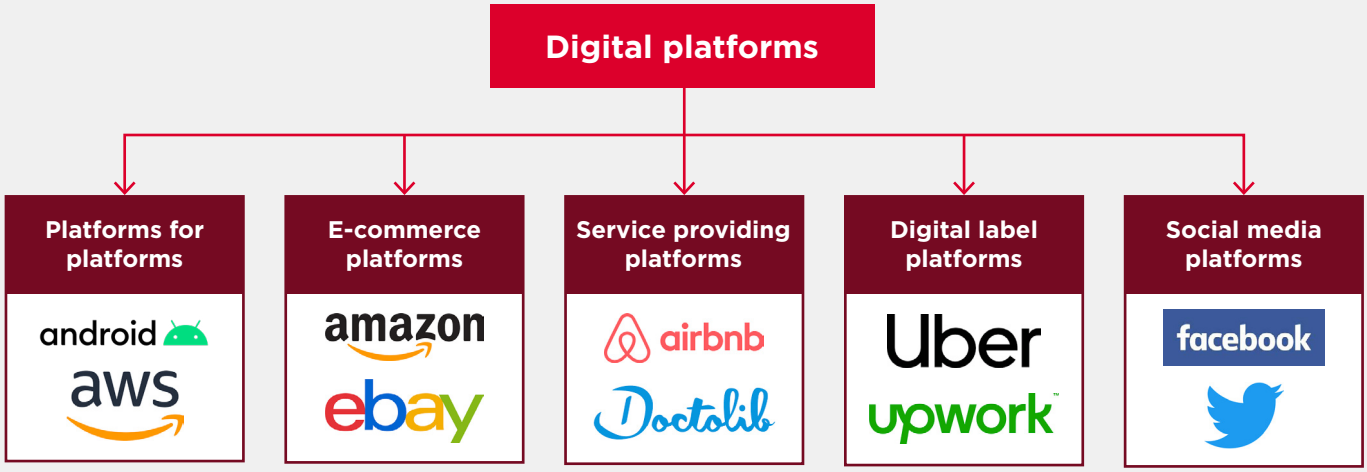
5. GSMA Intelligence. (2021). Scaling digital platforms through partnerships: The value of collaboration between mobile operators and digital platforms in emerging economics. *GSMA*.

Unlike the linear (producer to consumer) business model, platforms are not involved in production, but instead offer the means of interaction. As a result, it **can reach scale at a faster pace and lower cost**. For example, a traditional hotel chain might take a year to add 1,000 more rooms to their portfolio, while a hospitality online platform can add 1,000 rooms to their platform in a few weeks by aggregating the offer.[6]

Digital platforms can be broken down into different categories (Figure 2):[7]

- **Platforms for platforms:** Providing infrastructure and tools for other platforms
- **E-commerce platforms:** Enabling the sale of goods
- **Service-providing platforms:** Providing services to users such as finding a service provider, booking an appointment or ordering food online, etc.
- **Labour platforms:** Aggregating supply and demand for work
- **Social media platforms:** Social interaction platforms

Figure 2
Categorising digital platforms



6. Applico. (n.d.). Platform vs. Linear: Business Models 101. Accessed 5 February 2024.
7. Based on Kenney, M. & Zysman, J. (2016). The Rise of the Platform Economy. *Issues in Science and Technology 32, no. 3* and TSobrado (n.d.) What are digital platforms and why do they matter? Accessed 5 February 2024.
8. Note: Some of these platforms offer multiple features and can be classified under several categories (e.g.: Facebook is a social media platform, but its marketplace can be considered as an e-commerce platform or even a digital labour platform where people use it as a tool to apply for job opportunities).

3.2 The benefits and risks of platform economy in emerging economies

The digital platform economy is a powerful mechanism for scaling innovation in emerging economies, supporting the development of a digital ecosystem that creates long term economic and social value. Studies highlight that digital platforms can increase business and worker productivity (e.g. through better market access) and provide an entry point for formalising enterprises.[9,10] Moreover, digital platforms are helping to deliver better-quality education, improved health outcomes and other positive societal contributions for millions of people. The importance of such platforms has been underlined by the COVID-19 pandemic.

For instance, ride-sharing platforms can help reduce carbon emissions and promote responsible consumption, while labour platforms can generate economic growth, create new jobs, and improve quality of life. Digital platforms can also expand markets for intellectual property creators and enable workers to connect with potential hiring companies and access new work opportunities.[11] People who are unable to actively participate in the traditional labour market (including marginalised communities) can also benefit from the digital platform economy and its flexibility to choose suitable work opportunities in terms of time, responsibilities, and compensation.[12,13]

The multidisciplinary nature of the digital platform economy reinforces the positive outcomes on the Sustainable Development Goals (SDGs) by fostering collaborations between different sectors.

9. Lakemann, A. & Lay, J. (2019). Digital Platforms in Africa: the "Uberisation" of Informal Work. *GIGA Focus Africa, 7, Hamburg: German Institute of Global and Area Studies.*
10. BCG. (2019). How Online Marketplaces Can Power Employment in Africa.
11. ILO. (2018). The architecture of digital labour platforms: Policy recommendations on platform design for worker well-being. ILO Research Paper.
12. Diginomica. (2015). Will the sharing economy strike the right legal balance between empowering and exploiting workers? Accessed 5 February 2024.
13. Dillahunt, T.R. & Malone, A.R. (2015). The Promise of the Sharing Economy among Disadvantaged Communities. *CHI '15: Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems.*

Examples of digital platforms:

Improved access to health services via e-health platforms[14]

Kea Medicals is a Benin-based digital health platform that allows patients to create a unique digital health identity (ID) that holds their emergency medical information and medical history, helping hospitals to digitally manage their financial, medical and administrative operations. They recently secured a partnership with the Government of Benin which will see them roll out their infrastructure to 250 public hospitals.

Improved access to quality education[15]

Vlaby is a multi-award-winning Egyptian platform which simulates a traditional science laboratory and enables school students in the Middle East and North Africa (MENA) region to conduct low-cost remote science experiments.

Contribution to small and medium enterprise (SME) development through simplified transactions and wider access to markets[16]

Jumia, the African e-commerce giant present in over 10 countries, allows local SMEs to offer their products to customers country-wide. In 2020, there were 110,000 active sellers on the platform and 28 million orders were made. The company directly employs over 5,000 people in Africa.[17]

Opportunities for job creation[18]

TeraWork is a Nigerian platform that connects freelancers to potential customers locally and internationally, offering job opportunities to thousands of freelancers in several African markets.

Strengthening of institutions through improved transparency and accountability of the government to citizens[19]

SUDPAY is a Senegalese platform that helps municipalities identify taxpayers and digitally collect taxes through mobile money, enabling them to better control their tax collection and preventing tax fraud. The company is present in nine francophone African countries.

14. For more details on the positive impact of digital health platforms on SDG 3: access to health services, see: ITU. (2020). Digital Health Platform Handbook: Building a Digital Information Infrastructure (Infostructure) for Health.
15. For more details on the positive impact of online educational platforms on SDG 4: quality education, see: Sridharan, S. et al. (2018). The potential of an online educational platform to contribute to achieving sustainable development goals: a mixed-methods evaluation of the Peoples-uni online platform. *Health Res Policy Sys 16, 106.*
16. Cenamor, J. et al. (2019). How entrepreneurial SMEs compete through digital platforms: The roles of digital platform capability, network capability and ambidexterity. *Journal of Business Research Volume 100.*
17. Jumia. (2021). Media Kit.
18. European Training Foundation. (2021). Future of Work: the platform economy. Accessed 5 February 2024.
19. World Bank. (2017). Spotlight 11: From transparency to accountability through citizen engagement. World Development Report 2017: Governance and the Law.

While the benefits of the digital platform economy are clear, this model also entails significant key risks that are particularly pronounced in emerging economies:[20]

1. **Consumer data** is core to the platform economy business model. As a result, data loss and misuse can be hugely damaging. In most emerging economies, data protection is not seen as a priority and therefore there are very few safeguards against the illegal use and misuse of consumer data. Consequently, the risk of consumer data being used for improper purposes is high, particularly for the most vulnerable groups such as women. Appropriate regulatory framework for data privacy (e.g. the European General Data Protection Regulation framework) can mitigate such risk.

2. The digital platform economy business model directly affects traditional businesses (those who do not have a presence in the digital space) and in some cases can lead to a **loss of employment** in these traditional businesses, often among vulnerable populations working in the local informal economy. Appropriate training programmes to retrain workers for jobs created by this new economy could help mitigate this risk.

3. Employment created in the digital platform economy is often flexible. While this flexibility is often welcomed by participants, it does not guarantee the same **job security** as full-time employment, particularly for those operating in the 'gig' economy who often work on a very short-term basis. This may lead to pressure on earnings, **working conditions**, employment status and/or access to social protection/unemployment benefits,[21] as well as discrimination based on ethnicity, race or gender. Appropriate awareness and partnerships between the private sectors and organisations advocating for better work conditions (e.g. the Internal Labour Organisation) to build capacity within the platform players could help mitigate this risk.

4. While the digital platform economy can drive social and economic empowerment, it can also result in the **exclusion of the most vulnerable from new opportunities** (such as digitally illiterate individuals with no access to a computer or appropriate device and/or individuals living in areas with no mobile/internet network). Appropriate digital inclusion programmes in both the public and private sector will be key to addressing this, especially acting on one of its main barriers—digital skills. Typically, while digital platforms can improve access and quality of public services, there is a risk of serving only those that are digitally savvy, hence the importance of working on accessibility, offering a non-digital alternative and educating users.

20. Ministry of Economic Affairs of the Netherlands. (2015). Argument Map the Platform Economy. Accessed 5 February 2024.
21. For more detail on the specific risks inherent to digital labour platforms, see research conducted by the Fairwork Foundation: https://fair.work/en/fw/homepage/.

3.3 Enablers influencing the emergence of the platform economy

To enable the digital platform economy to thrive, deliver all its benefits and reduce the risks raised in the previous section, different enablers must be in place, requiring close collaboration and partnerships between the public and private sector:

1. **Connectivity:** Reliable internet, through fixed line or mobile infrastructure, is the primary enabler of the platform economy.

2. **Payment infrastructure:** Digital payments, including mobile money and digital wallets, facilitating a safer, cheaper and more transparent payment collection are also fundamental to the functioning of the model.

3. **Logistics infrastructure:** Efficient logistics infrastructure supports customer outreach channels for order fulfilment as well as growing the supply side.

4. **Enabling environment:** The country's regulatory landscape provides the framework and governance to safeguard market players' interest. This must keep pace with advances in technology.

5. **Digital trust and cybersecurity:** Robust cybersecurity frameworks and data and privacy standards are essential to building trust in digital platforms, preventing data breaches, identity theft and other reputational risks.

6. **Analytics tools:** Tools that help generate and analyse digital user behaviour enable companies to improve the customer journey and to speed up product development.

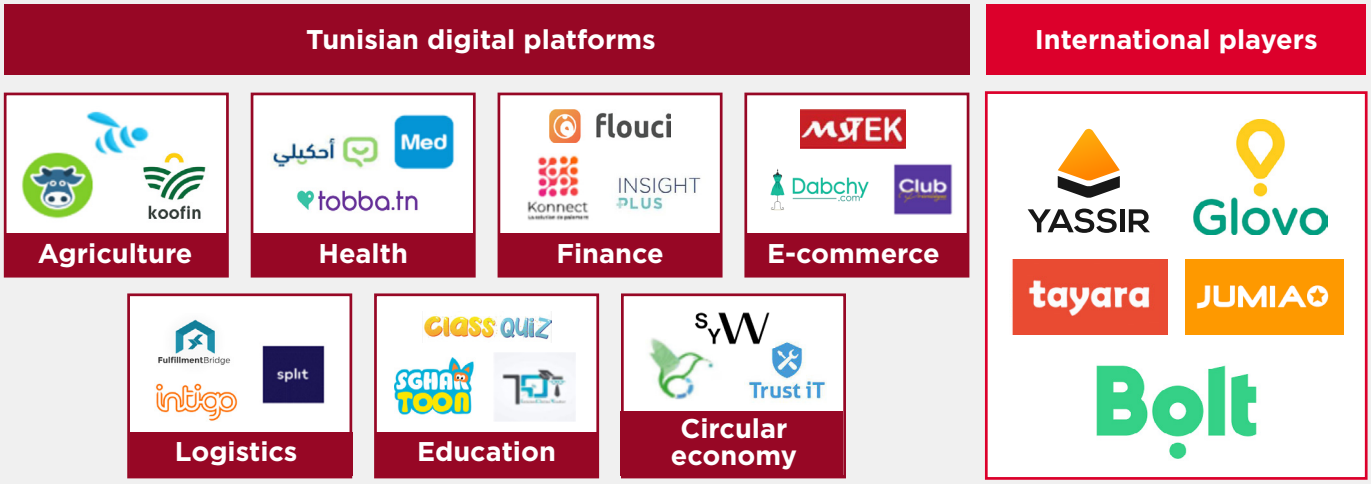
7. **Digital skills:** Both users and suppliers need adequate digital skills to generate value from the platform economy.

4. The digital platform economy in Tunisia

4.1 Current state of play

The digital platform economy is at a **nascent stage in Tunisia**, with most companies still working to find a successful business model. Many homegrown platforms operate locally and only a few of these platforms have subsidiaries abroad.[22]

Figure 3
Sample of businesses with platform economy models in Tunisia



22. Startup Tunisia Annual Report. (2021). Annual Report 2021.

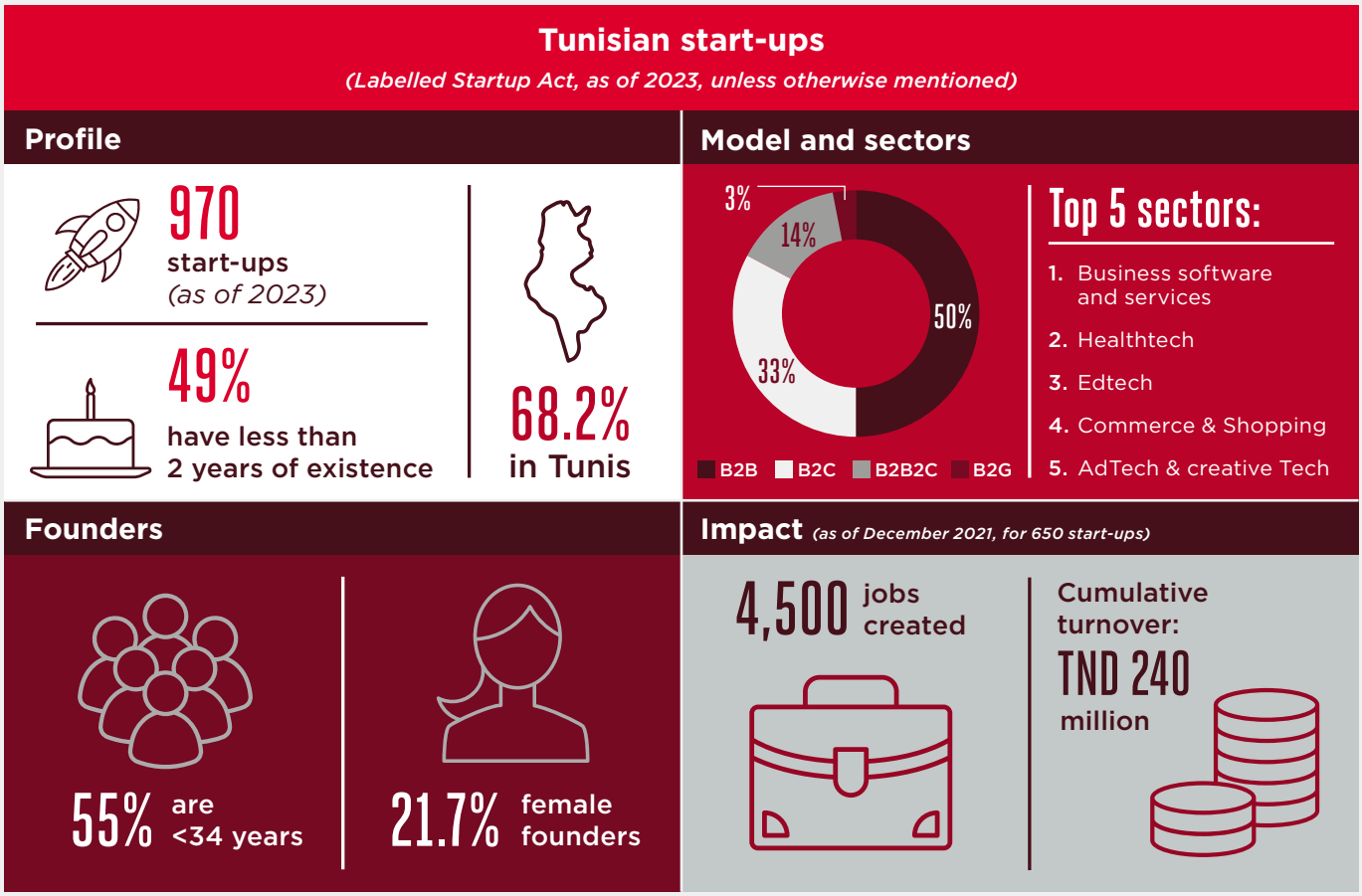
There is no official data on digital platform economy companies in Tunisia, therefore this report has used Smart Capital Tunisia data as a proxy. Using this data, our research suggests **more than 250 digital platform economy companies are operating in Tunisia** (e-commerce sites, service providing platforms, digital labour platforms in the mobility or tech industry, marketplaces etc.),[23] with approximately 25% of these operating as start-ups. This data also shows that the dominant business model in the digital platform economy in Tunisia is the B2B model (47%), followed by B2B2C (20%). The dominance of the B2B model may be explained by limited B2C market depth and the limited means of payment systems, thus reducing opportunities to monetise transactions for the B2B2C market.

Other digital platform economy stakeholders are older players, typically retailers with an e-commerce platform. Many of them are not classified as start-ups, either because they did not apply for the label or do not meet the eligibility criteria (e.g. too many employees, etc.). In addition to this lack of data on the number of digital platform economy companies in Tunisia, there is also a lack of data quantifying the workforce in the platform economy and its contribution to the national economy.

Using start-ups as a **proxy** is useful to better understand the platform economy, particularly its dynamics and socio-economic impact. This indicates that:

1. Most companies are located in the Greater Tunis area and coastal cities.
2. Founders are overwhelmingly male, with only 2.3% of start-ups led exclusively by women.
3. Start-ups are increasing employment opportunities, creating more than 4,000 direct job opportunities.

Figure 4
Tunisian start-ups in focus



Sources: Smart Capital (2021) Start-up Tunisia Annual Report

23. Altai Consulting estimates, based on secondary research on the start-up and e-commerce ecosystem in Tunisia and key informant interviews.

Another useful proxy is e-commerce website statistics, which can measure the change in consumer habits and digital adoption. Dynamics and trends in e-commerce websites (many of which are platform economy businesses but not start-ups) are also instructive to understand consumer habits and trends (Figure 5). The number of e-commerce websites is now sizable (2,100) but digital infrastructure is clearly lacking; most transactions are paid through cash on delivery (80%), with half of the transactions occurring informally.

Figure 5
Tunisian e-commerce websites in focus

Tunisian e-commerce sites

2,100
e-commerce sites
connected to Monétique Tunisie to offer online payments

80%
cash on delivery
to pay for goods purchased online

50%
informal sales
through social media pages (Facebook, etc.)

Sources: La Presse. (2021). E-Commerce: Une croissance en trompe-l'oeil?; and Tunisie Numérique. (2021). Covid-19, une aubaine pour le e-commerce?

4.2 Digital transformation in Tunisia: The potential contribution of the platform economy

The Tunisian government has implemented an ambitious national digital strategy comprising ten key pillars to fully leverage all the potential of the digitalisation for the country:

1. Revision of the legal framework and digital administration
2. Social inclusion (digital and financial)
3. Digital infrastructure
4. Digital transformation of public administration
5. Cybersecurity
6. Data-driven government
7. Digital culture - development of digital skills and culture
8. Development of the digital entrepreneurial ecosystem
9. International cooperation
10. Communication and change management.

Some of these pillars—digital infrastructure, cybersecurity, digital/financial inclusion, and legal framework—are **key enablers** for the digital platform economy to thrive, as underlined in section 3.3 of this report, and therefore **this strategy provides a solid framework for the digital platform economy to develop and succeed**. Specific examples include:

- **Legal framework:** The government has encouraged several initiatives such as the establishment of a favourable ecosystem and the launch of support programmes to enable innovative start-ups to grow and contribute to the competitiveness of the country in the field of disruptive technologies (e.g. Start-Up Act).
- **Digital infrastructure:** Establishment of a 5G roadmap and reduction of the connectivity gap in Tunisia.
- **Digital skills:** Internet usage is sophisticated, with elevated levels of digital literacy in cities, although gaps exist in rural regions. One third of the population falls under the usage gap with limited mobile internet usage (especially rural areas).

In turn, the development of the digital platform economy can support some of the objectives of the **Tunisia National Digital Strategy 2021-2025:**

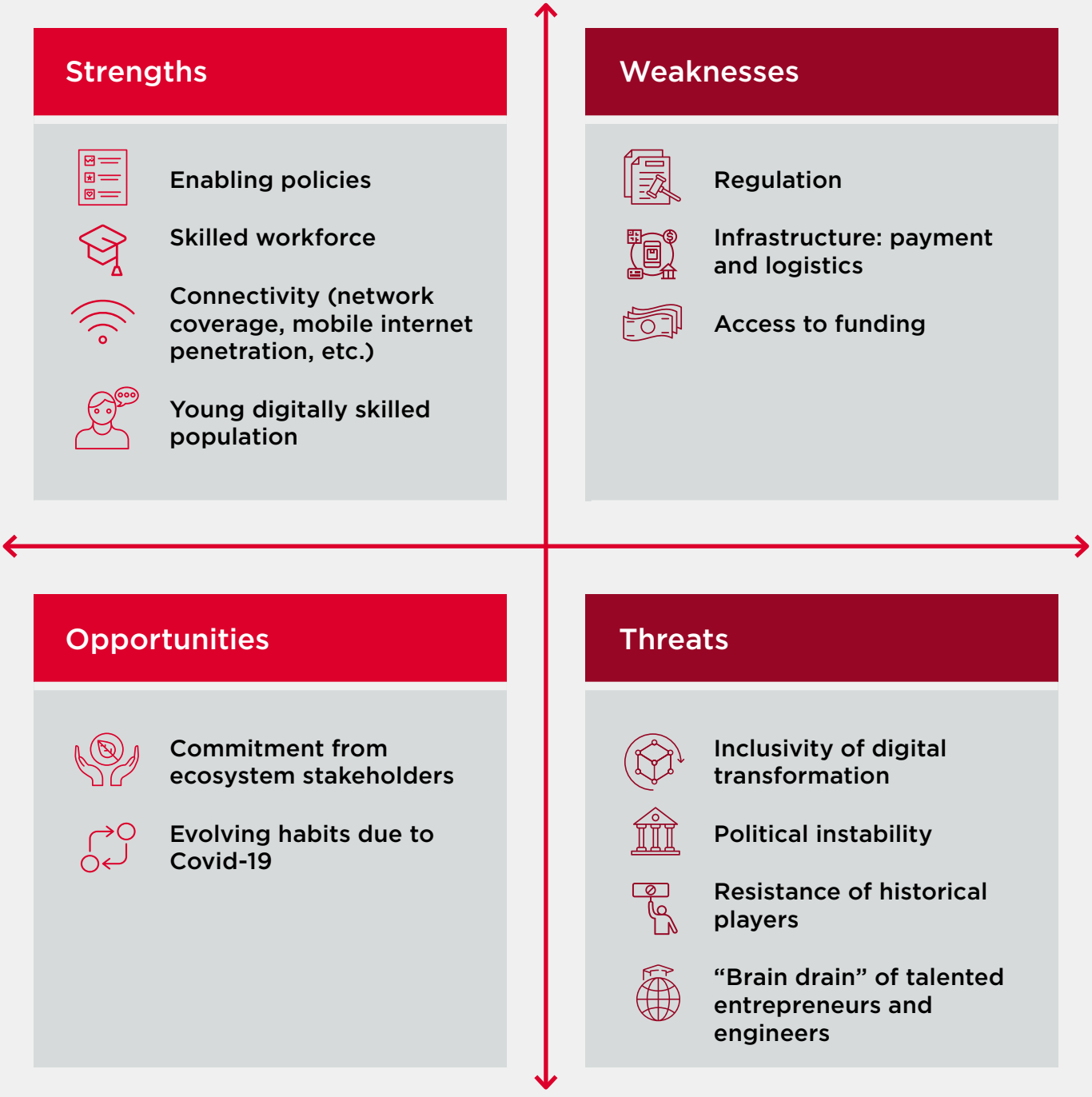
- **Digital entrepreneurial ecosystem:** Due to the significant value creation and modest operating costs as well as network effects, entrepreneurs are particularly drawn to the digital platform economy,[24] therefore supporting the development of Tunisia as a digital entrepreneurship leader in the region.
- **Capacity building:** Digital education platforms (e.g. WeCode or HackUp) have upskilling at the heart of their business model, supporting the reskilling of the workforce towards digital professions.
- **Social inclusion:** As underlined in section 3.3, platforms can drive socio-economic improvements, such as creating new jobs and lowering transaction costs for customers (including better price transparency, reduction of inventory and research costs in many sectors). This supports the ambition of reducing the social divide.

24. Harvard Business Review. (2015). How to Launch Your Digital Platform. Accessed 5 February 2024.

4.3 SWOT analysis of the Tunisian digital platform economy

To evaluate Tunisia's competitive position in relation to the digital platform economy model, a Strength, Weakness, Opportunity and Threat (SWOT) analysis was conducted to identify how stakeholders could better contribute to the digital platform ecosystem. This analysis is summarised in Figure 6, with a wider discussion found in Annex 1.

Figure 6
SWOT of the digital platform economy in Tunisia



4.4 Understanding the platform economy in Tunisia: Insights from the Platforms for Tomorrow programme

The Platforms for Tomorrow (P4T) programme was launched in May 2022. The objective of the programme is to champion six digital platforms and provide them with customised technical assistance to improve their socio-economic impact by creating employment, improving job quality and livelihoods, and supporting sustainable growth in the country.

The programme provided targeted and customised support to optimise their solutions, increase ability to scale and improve socio-economic impact around the workforce, create employment and improve livelihoods. To promote and enhance fair working conditions, the GSMA partnered with experts from the **International Labour Organization** (ILO), working with their Sustaining Competitive and Responsible Enterprises (SCORE) programme and using ILO's SCORE methodology. The objective of this collaboration was to improve the productivity and working conditions of the platform workers by combining practical classroom training with in-company consulting tailored to the specific needs of the selected digital platforms.

HackUp | Tech talent recruitment and skills assessment platform

HackUp is a digital platform that provides high-quality evaluation tests and technical skills for IT talent, helping them to upskill and find jobs in leading tech companies. HackUp works with 3,000 developers in the community and a larger pool of 70,000 IT talents accessible through partnerships with coding schools, student groups and universities. HackUp creates opportunities for young people in the tech industry to find jobs and assess their skills.

Ijeni | Pairs individuals with professionals who can deliver instant services

Ijeni is a digital platform that connects individuals and businesses in need of instant repairs and fixes in a broad range of services with professional experts. The platform creates job opportunities for professionals in search of work and offers a dignified working environment. About 16,000 professionals are on the platform, with an estimated addressable supply of 600,000 service providers in Tunisia.

Kamioun | The first B2B e-commerce platform reinventing the corner shops supply chain

Kamioun is the first B2B e-commerce digital platform to enable small corner shops to buy and procure their inventory in an effortless and affordable way. Kamioun connects these shops directly with fast-moving consumer goods (FMCG) companies and ensures they can receive their supply seamlessly and at a fair price. The platform supports the workforce development of small retailers (2,900 retailers are currently on the platform).

The ILO provided a mix of online sessions, in-person training and workplace assessment. The start-ups were specifically trained on workplace cooperation, occupational safety, and health in the workplace. In addition to providing training and workplace assessments to the digital platforms, ILO was also involved in training workers on digital platforms and organisations collaborating with the supported platforms on occupational health and safety in the workplace. ILO delivered a workshop in partnership with Warm to raise awareness on occupational health and safety for workers in the furniture industry.

SemSem | Logistics and mobile payment provider for the restaurant industry

SemSem is an on-demand services marketplace connecting customers with local merchants through independent drivers. SemSem provides employment opportunities for individuals without a job and enables merchants productivity through its app payment feature.

Through their super app, SemSem has onboarded 2,000 dedicated drivers and digitalised 4,000 points of sales and businesses. Since its inception, 250 restaurants have been onboarded, averaging 6,000 monthly orders and a total of 22,000 transactions.

Warm | Foster circular economy business models in the furniture market

Warm is a digital marketplace that helps connect buyers and sellers to find the right piece of furniture and decor for their homes and offices, promoting responsible consumption of furniture and empowering artisans to sell their creations online. Warm has over 100 of these independent service professionals listed on the platform, with a plan to reach 1,000 professionals. Warm's 100 unique sellers are 70% women, with 2,000 items listed generating over $50,000 in revenue.

WeCode | Sustaining digital jobs and creators of educational content

WeCode is a digital platform that connects skill seekers with training and certified educational content, helping students to keep up with the latest skills and be relevant in the job market. WeCode has supported over 40 university teachers to upskill through educational content and international certifications and increase their revenue. WeCode now holds over 700 courses and has reached 25,000 students, with 16,000 students registered on the platform.

In total, 593 people have been trained through the P4T programme in Tunisia by both the ILO and GSMA to support advancement of the platform economy and improve working conditions in the platform economy. Out of the six supported platforms, Warm, SemSem, Ijeni and WeCode have made changes to their working environment as a result of the training provided by the ILO. They have implemented several recommendations, including digital suggestion boxes for their online platforms, centralising information storage, changing work-space layouts, and establishing continuous improvement teams. Kamioun has newly revised contract templates for their delivery workers, suppliers and customers that are expected to enhance transparency of engagement by all parties, leading to enhanced working conditions and formalising jobs for the platform workers. One major recommendation was to join a medical scheme, as outlined in Tunisian legislation, but the start-ups are yet to implement this.

GSMA commissioned an end-user survey targeting platform workers from all six supported platforms to assess the extent to which workers on these platforms have improved their livelihoods. The survey looked at different metrics that acted as proxies for improved livelihoods, including improved income, access to training for career advancement, access to pension and workplace safety. The survey results show that there is a general perception that the supported start-ups are improving the lives of the platforms workers and enhancing their safety on the digital platforms.

A proportion of gig-workers indicated that their lives have improved as a direct result of working on digital platforms, but this was not the case for all gig-workers surveyed. Fifty-six per cent of gig-workers indicated that their wages have reduced and another 28% reported that their incomes have remained the same. Only 16% of those interviewed reported improved incomes. The reduction and stagnation of wages can be explained by limited working hours, as 41% of the survey respondents worked less than 12 hours a week, lowering their ability to earn more. Thirty-seven per cent of survey respondents have also worked on the platforms for a period of less than three months, limiting their ability to receive high ratings from customers and to attract more work.

Only 25% of respondents reported improved workplace safety. This can be attributed to gig-workers having negative experiences while working on the platforms: 30% of the respondents indicated that they have experienced physical discomfort, 22% have experienced unwanted advances from clients, and 20% have been spoken to in an impolite way by clients.

CASE STUDY

Tunisian workers in delivery platforms

The digital platform economy in Tunisia, particularly in the field of delivery services, has seen significant growth. A substantial number of individuals are engaged in this sector, especially in major cities like Tunis, Bizerte, Sfax and Sousse. The transformation of this market, influenced by the broader trend of Uberisation, has led to the emergence of new business models and a shift in labour dynamics. Companies such as Yassir Express have diversified their services beyond their initial scope to adapt to market needs.

The employment conditions of delivery workers in Tunisia, however, raise several concerns. Workers often bear the costs of essential equipment and are subject to precarious contractual arrangements, mostly mediated through third-party logistics (3PL) entities. These entities act as intermediaries between delivery platforms and individual delivery workers, affecting employment contracts, payment structures, and operational logistics. This model has implications for the costs borne by delivery workers, their working conditions, their health and safety (e.g. no adequate support or compensation in case of accidents) and the broader dynamics of the delivery services market in Tunisia. The impact of 3PLs on the sector underlines the need to establish a strong legal framework around the status of independent contractors in Tunisia and to rethink the entire system of independent providers and the national fiscal system. These discussions should include 3PL entities, given their role in the sector.

5. Recommendations to accelerate the development of the platform economy in Tunisia

GSMA has developed recommendations for the different stakeholders of the Tunisian digital platform economy to accelerate its adoption across sectors and generate a positive socio-economic impact.

These recommendations are based on desk research as well as the views of different actors interviewed within the Tunisian innovation ecosystem as part of this research.

Government

Through the Tunisia National Digital Strategy 2021-2025, the Tunisian government has formulated a set of strategic pillars to drive the country's digital transformation and position it as a leader. It has also encouraged several initiatives that are key for a platform economy to thrive. Their latest initiatives include the establishment of a favourable ecosystem and the launch of support programmes to enable innovative start-ups to grow and contribute to the competitiveness of the country in the field of disruptive technologies (e.g. Start-Up Act), the establishment of a 5G roadmap and the reduction of the connectivity gap in Tunisia.

Government (Continued)

The Start-Up Act has created momentum for a new generation of entrepreneurs in Tunisia by simplifying the start-up launching process and creating the ANAVA fund of funds, with €200 million allocated to specific verticals and launching a strategy to consolidate the ecosystem and hubs in Tunisia.[25]

To establish the National Digital Strategy, the Tunisian government has adopted a **participatory approach** that includes the private sector as well as international organisations. This has resulted in a stronger buy-in from these diverse stakeholders. To further accelerate the development of the platform economy in Tunisia, it is recommended that the government considers the adoption of the following initiatives, through a participatory dialogue with the private sector:

1. Encourage **investment** by offering additional incentives (tax deductions, further tax exemptions on capital gains, etc.) to early-stage investors (e.g. friends and family, business angels) in Tunisian start-ups.
2. Encourage new entrants in the payment sector by offering 'établissement de paiement' (payment service bank) status to more stakeholders.
3. Improve **supply chain** performance by investing in La Poste and logistics infrastructure.
4. Finalise a legal framework to protect gig-economy workers, allowing them to fully participate in the economy.

> **"The government should conduct awareness campaigns on digital payment. We still need to use payment on delivery because customers do not pay online. We send an envelope with an activation code and parents pay cash."** [26]
>
> Sabrine Ibrahim, founder of the mobile powered ed-tech start-up Class Quiz

Tech hubs / incubators / accelerators

Tech hubs and accelerator/incubator schemes have played an important role in growing the culture of entrepreneurship in Tunisia. According to Smart Capital, 43% of Tunisian start-ups get support from tech hubs, including getting the right digital skills and technical assistance to launch and develop a new venture, therefore encouraging the development of the platform economy.[27]

To further accelerate the development of the digital platform economy in Tunisia, it is recommended tech hubs/incubators/accelerators consider the adoption of the following initiatives:

1. Facilitate dialogue between platform economy players and enabler organisations such as mobile network operators (MNOs), providers of payment solutions (Via Mobile, Flouci, Konnect, Paymee, banks, etc.) or providers of logistics solutions (La Poste, Aramex, etc.) to find ways to simplify access to this critical infrastructure to launch and scale.
2. Support **entrepreneurial and digital training** for early-stage platform economy players through the reinforcement of coaching/mentoring programmes (e.g. designing a business plan, investment readiness support programmes, etc.)
3. Launch campaigns on digital skills for end users to better understand and utilise digital platforms, especially for rural areas where 40% of the usage gap falls. Basic internet literacy training could help onboard less digitalised individuals to reap the benefits offered by these digital platforms.

25. Startup Tunisia Annual Report. (2021). Annual Report 2021.
26. Platform Economy Stakeholder Interview, Class Quiz.
27. Startup Tunisia Annual Report. (2021). Annual Report 2021.

Mobile network operators

MNOs have heavily invested in the development of key enablers for the platform economy. Tunisia has a good coverage track record in terms of mobile internet, with 96% 4G coverage in 2022.[28] They have also engaged with the local tech ecosystem by offering a variety of programmes targeting tech entrepreneurs such as Orange Fab accelerator, the Ooredoo Experience Centre and Tunisie Telecom's presence at The Dot, a national innovation hub supporting entrepreneurship.

In addition, they have been pushing for the deployment of mobile financial services that can provide solutions for the unbanked population, with the Central Bank of Tunisia responding favourably to this potential by offering preliminary authorisation for MNOs to launch their payment establishment. However, this initiative has stalled due to disagreements around governance.

To further accelerate the development of the digital platform economy in Tunisia, it is recommended that MNOs consider the adoption of the following initiatives to strengthen the enablers of a platform economy:

1. **Continue the deployment of broadband digital infrastructure** in all regions, which is critical for the digital platform economy to thrive. This includes working with the Tunisian government on the 5G roadmap.

2. Continue to leverage the Universal Service Fund[29] to **improve access to coverage** among underserved populations.

3. Deployment of mobile operator-led payment services to promote digital payment, helping improve the financial inclusion gap in the country.

4. Leverage best practices from other MNOs' initiatives to drive mobile internet adoption:

   (i) **Set clear goals:** Align digital skills campaigns with the company's objectives to ensure results are effectively highlighted and measured.

   (ii) **Immediate application of skills:** Ensure digital skills campaigns offer customers opportunities to immediately apply their new skills, enhancing engagement and success.

   (iii) **Invest in trainers:** Prioritise hiring trainers who are adequately compensated and well-connected, and providing incentives to trainees as this directly contributes to the quality of digital skills training provided.

   (iv) **User-centric content design:** Develop training content with a strong focus on the end user's needs and abilities, making the training more relevant and effective.

   (v) **Gender-sensitive approach:** Recognise and understand the different ways in which men and women use mobile internet, and design inclusive digital skills campaigns that cater to these differences.

28. GSMA. (2023). The GSMA Mobile Connectivity Index. Accessed 5 February 2024.
29. Universal Service Fund (USF) operates as a mechanism by which interstate long distance carriers were assessed to subsidise telephone service to low-income households and high-cost areas.

Universities

Universities have been very supportive in promoting entrepreneurship in Tunisia through hosting incubators and labs, networking initiatives or upgrading their curriculums to include courses on entrepreneurship and IT skills, etc.

To further accelerate the development of the digital platform economy in Tunisia, it is recommended that universities consider the adoption of the following initiatives:

1. In coordination with tech hubs, design curricula and training sessions adapted to platform economy needs, including developing entrepreneurial skills to help prepare the workforce for future digital jobs. Some universities have deployed curriculums that can educate students on how to launch, maintain, and develop platforms and how to use platforms to increase business efficiency.
2. Through hackathon challenges, encourage researchers and students to work together with the entrepreneurial ecosystem, e.g. develop applications for the platform economy.

Associations / foundations

One of the key enablers influencing the emergence of the digital platform economy is digital literacy. Associations and foundations have been key to launching programmes that train the most disadvantaged groups in digital skills and ensure their participation in the emerging platform economy space.

> **"Digital literacy and an inability to use the mobile internet is one of the main barriers to the adoption [of] their services, especially older than 35 years old and sometimes uneducated, population nearing two million. An opportunity is that there are more young people among retailers. We need a conjoint effort from the government and associations to educate people."**[30]

As such, to further accelerate the development of the digital platform economy in Tunisia, it is recommended that associations/foundations consider the adoption of the following initiatives to increase digital literacy:

1. Develop **digital skills programmes** to train Tunisians at risk of digital exclusion (women, rural populations, those working in the informal economy and in traditional businesses at risk of being "platform-ised" etc.) on how to leverage digital platforms to earn a living by selling goods, doing freelance work, etc.
2. Partner with the government and other stakeholders to agree a coordinated action plan to improve the reach of existing initiatives on digital literacy.

30. Platform Economy Stakeholder Interview, Kamioun.

Platform economy players

Finally, it is important that all the risks linked to the digital platform economy, especially regarding working conditions, are recognised and tackled by the platform economy players themselves. With a high informal sector, the development of a structured platform economy is critical for enhancing job opportunities and ensuring worker welfare. Several stakeholders, including the ILO, Yassir, Glovo and Kamioun, have shared their perspectives and recommendations for improving working conditions in this evolving sector, including:

1. The establishment of a Council of Platform Economy to collaborate with trade unions and advocate for better conditions.
2. Launching an awareness campaign to educate stakeholders on platform opportunities and encourage communication between platforms and authorities.
3. The creation of commercial associations of digital platforms to collectively address challenges.

Spotlight: Glovo

In July 2023, Glovo announced the official launch of its main programme in Tunisia, Carrier Pledge,[31] created in collaboration with the Fairwork project.[32] This pledge enforces a framework for decent working conditions for over 2,500 workers. This includes a fair and transparent hourly wage for workers; policies and workers' insurance that covers illness, time off and births; an open dialogue with couriers to consider their views on decent work policies; and an e-learning platform and community to support couriers to develop their skills and career pathways.

Such initiatives coming from the platform economy players underscore the imperative to strike a balance between platform economy economic growth and the well-being of platform workers in Tunisia.

31. Leaders. (2023). The Courriers Pledge: Glovo s'engage pour garantir les droits sociaux des coursiers en Tunisie. Accessed 5 February 2024.
32. Fairwork. Accessed 5 February 2024.

6. Conclusion

At a macro level, the digital platform economy has been a force for socio-economic impact, lowered the costs of services and created new job opportunities. However, for this potential to be realised in full, some enablers (such as digital skills, payment, and logistic infrastructure) are necessary. The digital platform economy however entails several key risks that can limit or hinder its socio-economic impacts: misappropriation of consumer data; loss of employment in traditional businesses; more precarious work conditions for the workforce of the digital platform economy and the risk of excluding the most vulnerable groups due to the digital skills gap. To mitigate such risks, a mix of regulation, digital skills programmes and capacity building to train / upskill workers and awareness building at the platform economy level is necessary.

Although there is no official data on the digital platform economy companies in Tunisia, proxy data suggests that the digital platform economy is at a **nascent** stage. This study identified close to 250 businesses with a platform economy model, with many of them operating in sectors such as logistics, e-commerce, health, education and agriculture.

While their potential for job creation, digitalisation of supply chains and creation of wealth is important, they face challenges due to the lack of an adapted legal framework as well as difficulties in implementing business models, including a lack of digital payment channels that make it hard to sustain their activities and grow.

Readiness is high though. Mobile broadband coverage is strong, mobile ownership is high and the population is young and tech-savvy. In addition, through several initiatives (e.g. the Start-Up Act) and in particular the Tunisia National Digital Strategy 2021-2025, the Tunisian government is pushing digitisation at the heart of the economic and social development of the country, thus encouraging the deployment of the right enablers for the platform economy to thrive. Tech hubs, associations and universities are deploying more programmes to upskill/ re-skill the workforce to the capabilities needed for these new digital jobs. However, the lack of e-payment adoption, efficient e-payment infrastructure and efficient logistics infrastructure as well as some regulatory barriers (e.g. to protect some specific sectors from competition) are current barriers for the platform economy to develop and succeed.

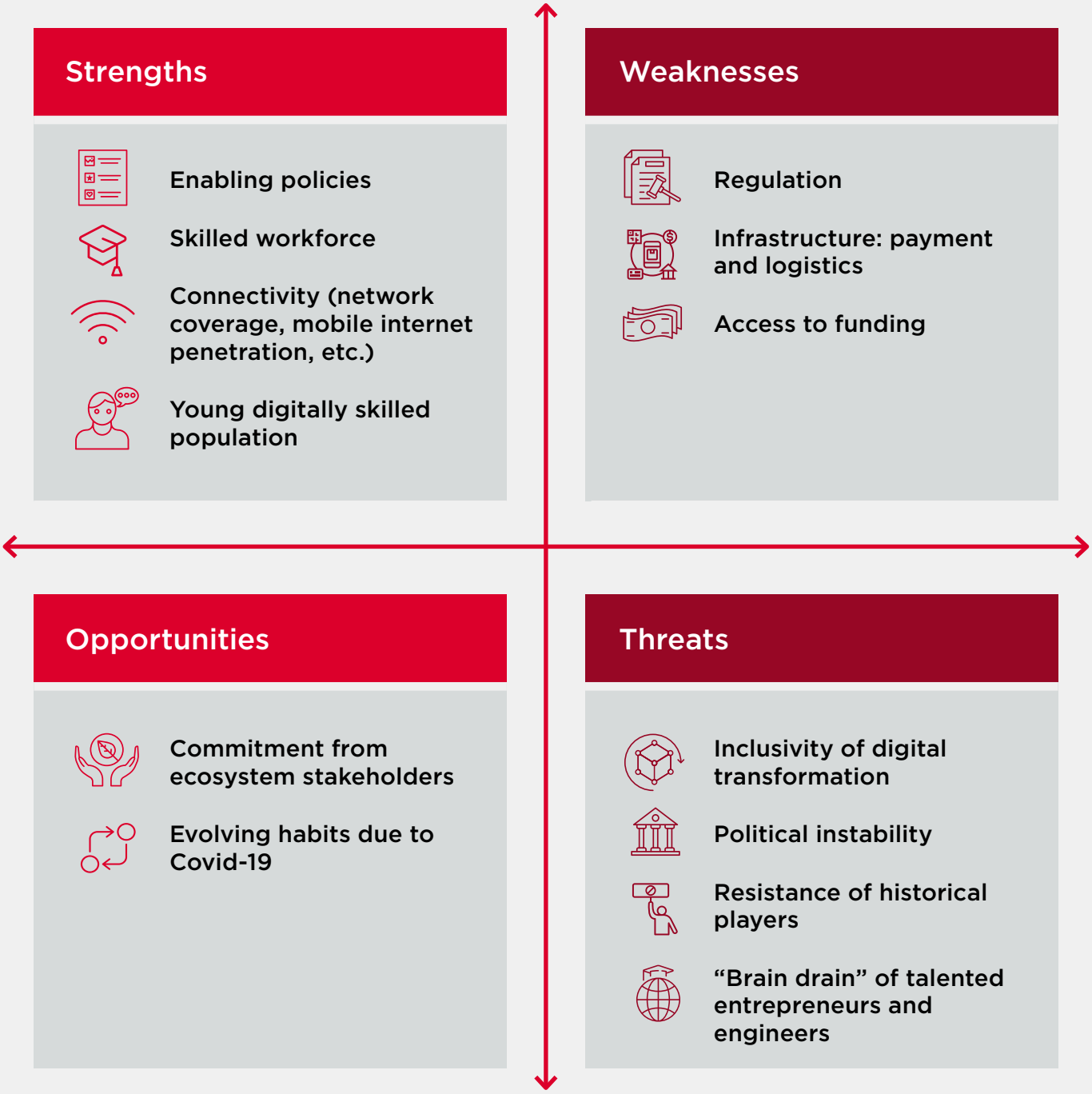
Removing such barriers will involve **public-private dialogue between several stakeholders**. This is one of many opportunities for Tunisia who has so far demonstrated a strong willingness for such dialogue to contribute to a more enabling environment.

Such dialogue will be necessary to discuss and agree ways to **mitigate the well-known risks** of the digital platform economy. Of foremost importance is building the capacity of the platform economy players to develop and implement best practices to improve working conditions for platform workers. Initiatives such as Glovo's Carrier Pledge[33] programme in Tunisia are a good sign that players in the digital economy want to address these challenges and are conscious of the imperative to strike a balance between platform economy economic growth and the well-being of platform workers in Tunisia.

33. Leaders. (2023). The Courriers Pledge: Glovo s'engage pour garantir les droits sociaux des coursiers en Tunisie. Accessed 5 February 2024.

Annex 1: Evaluation of the Tunisian digital platform economy ecosystem: A SWOT analysis.

Figure 6
SWOT analysis of the Tunisian digital platform ecosystem



Strengths

Enabling policies

Recent years have seen several encouraging policies and initiatives aimed at developing the digital platform economy and entrepreneurship:

— In close collaboration with ecosystem players, the Tunisian government launched the Startup Tunisia initiative in 2019, which is part of a wider strategy called Digital Tunisia 2020. This national initiative, operated by Smart Capital, created a legally recognised category of 'start-up,' giving them various inducements (Figure 7). The focus on entrepreneurship has been reinforced with the **Tunisia National Digital Strategy 2021-2025**.

Figure 7
Tunisian 'Start-Up Act'

Startup Act

To support the start-ups

- Legal farmwork creating a "start-up Act" label for eligible companies
- Labelled start-ups benefit from advantages and incentives for:
  - The entrepreneur (financial support registration fee exemption for patents, voluntary liquidation, etc.)
  - The start-up itself (Exemption of salary expenses and employer costs, account in foreign currency, etc.)
  - The investors (tax reduction, etc.

Startup Invest

To support the investors

- Legal framework aiming to create and enabling environment for the development of a VC fund's ecosystem
- Three main tools:
  - ANAVA fund of funds (EUR 200 million)
  - VC LAB – an incubator of asset management companies
  - A guarantee fund reduction, etc.

Startup Ecosystem

To support the ecosystem

- Support framework for start-ups and entrepreneurial hubs to support ecosystem stakeholders
- Three main tools:
  - Financing for start-ups and entrepreneurial hubs
  - Facilitation./ moderation of the ecosystem
  - International connection

Sources: https://smartcapital.tn/mission/; https://www.startupact.tn/avantages-startupact.html.

Other positive government initiatives include:

— In August 2020, a new law (Loi n° 2020-37 relative au Crowdfunding) opened the door to the wider use of crowdfunding. Three crowdfunding models are now officially recognised in Tunisia—borrowing, investing, and donation. Although more limited than some stakeholders expected (crowdfunding is only available to for-profit projects, crowdfunding platforms are only allowed one model of crowdfunding and need to open different companies if they want to do all three models, etc.), it represents a promising first step.

— In 2020, Tunisia also brought in a law to support sole traders, micro-entrepreneurs, and gig economy workers,[34] making it easier to create a profit entity and take advantage of administrative procedures and simplified tax and social procedures. The auto-

34. Imprimerie Officiell de la Repub Tunisien. (2021). No. 54 Journal Officiel de la République Tunisie. Gig work (https://www.gigeconomydata.org/) consists of alternative income-earning activities outside of standard ones, and may include freelancing, temporary agency work, self-employment and subcontracted work.

entrepreneur status is a simplified regime for a sole proprietorship. The auto-entrepreneur benefits from a specific tax and social regime which consists of paying a single contribution free of personal income tax, value-added tax, and contribution to the social security system. The value of the single contribution is set as 0.5% of annual turnover for income tax and 7.5% calculated based on two-thirds of the guaranteed agricultural minimum wage or the guaranteed industrial minimum wage, depending on the nature of the activity. The auto-entrepreneur can also join the social security scheme for self-employed workers in the agricultural and non-agricultural sectors. In this case, the contribution rate will increase to 11% of the guaranteed agricultural minimum wage or the guaranteed industrial minimum wage, depending on the nature of the activity under the social security scheme.

- As of December 2022, the publication of the decrees of application relating to the list of activities concerned have still not been published by the Ministry of Finance, as well as the decrees of application for the activation of the electronic platform, its modalities, organisation, and management. This platform is dedicated to this regime and will be managed by the Ministry of Vocational Training and Employment.

Strengths

Skilled workforce

Tunisia Higher Education

23%
of government spending or 6.6% of Tunisia's GDP is use for education (Corresponding to $2,849 million)
vs a world average of 14% and 4.5% respectively[1]

70,000
new graduates/year 1[3]

61%
of graduates are female[4]

35%
of university age youth are enrolled in higher eduction[2]

20 diplomas
from co-graduation agreements or co-designed courses with top US/ European universities[5]

Sources: 1. World Bank, 2015; 2. University World News. (2020). Women outnumber men at universities, lag in employment; 3. http://www.smarttunisia.tn/; 4. Ibid.; 5. Ibid.

Tunisia has always put a **strong emphasis on education**, which accounts for almost a quarter of the country's total expenditure and increasing budget.[35] In recent years, Tunisian universities have also begun training young graduates on entrepreneurial and digital skills. According to numbers collected by the UNESCO Institute for Statistics, tertiary students in Tunisia are among the most likely to graduate in a STEM field, with almost 40% of students receiving a respective degree, out of all countries where recent data was available.[36] The share of STEM degree recipients is due to the prevalence of computer engineering where three Tunisian universities feature in the top 10 best universities for computer engineering in Africa.[37]

Some universities (e.g., ESPRIT - École Supérieure Privée d'Ingénierie et de Technologie, Universite Centrale and MedTech) host incubators and labs enabling students to connect with key stakeholders of digital and innovation ecosystems. Programmes like Open Startup Tunisia which promote youth-led ventures are important vehicles to promote entrepreneurship in the country.

According to an entrepreneurship programme aimed at youth in Tunisia:

> **"It does not matter that educational digital platforms are not giving degrees, no one cares about the degree. They go to college only to get a diploma, but they do not count on the traditional system to find a job."**

Numerous EdTech platforms are being created in Tunisia and in the region as an alternative:

> **"Young people are creating a lot of start-ups in the education sector. Tunisia and education, it is a real love story."**

> **"People are really interested in courses given by people that are not teachers."[38]**

35. Arab Barometer. (2021). Education in Tunisia: Past progress, present decline and future challenges. Accessed 5 February 2024.
36. UNESCO Institute of Statistics. Accessed 5 February 2024.
37. EduRank (2023). Best Universities for Computer Engineering in Africa. Accessed 5 February 2024.
38. Platform Economy Stakeholder Interview, Open Start-up Tunisia.

Strengths | Connectivity

Access to internet in Tunisia

68% of web traffic in Tunisia is through mobile phones[1]

Mobile internet

77% of Tunisians own a mobile phone[2]

79% of mobile owners use mobile internet[3]

99% have 3G coverage; 90% 4G coverage[4]

There are strong reginal disparities5

- 90-100% 4G coverage in Tunis
- <70% in Tataouine, Kasserine, or Sidi Bouzid

34 Mbps internet speed on average vs 40 in Morocco, 18 in Algeria and 24 in Egypt[6]

$1.09/GB internet cost on average vs 0.88 in Morocco, 0.51 in Algeria, and 1.04 in Egypt[7]

Fixed internet

47% of Tunisian households own a computer[8]

45% of Tunisian households have a fixed internet connection at home[9]

There are strong regional disparities 10:

- 80% of households in Tunis
- 17% of households in Kasserine

11 Mbps internet speed on average vs 28 in Morocco, 8.5 in Algeria and 42 in Egypt[11]

$0.75/Mb internet cost on average vs 1.72 in Morocco, 3.50 in Algeria and 3.97 in Egypt[12]

Sources: MEDIANET LABS webanalytics, 2020; 2. GSMA Intelligence, 2021; 3. Ibid.; 4. Ibid; 5. Annual report INTT (Instance Nationale des Télécommunications), 2019; 6. Speedtest Global Index, June 2021; 7. Internet comparison, Cable.co.uk, 2020-2021; 8. INS, 2017 (updated 2021); 9. Annual report on infrastructure indicators, INS,2019 (numbers are 2020 estimates); 11. Same as source 6; 12. Same as source 7

Access to the internet is high, with 88.7%network coverage and 98% of the population covered by 4G networks. The GSMA Mobile Connectivity Index 2022 rates Tunisia as 'transitioner,' with one of the highest scores in North Africa.

In addition, the Ministry of ICT is establishing the national 5G roadmap for the future implementation of **5G** in the country. This roadmap covers benchmarking of 5G implementation worldwide, best practices, use cases, business plans and risk assessment.[39]

39. Okeleke, K. et al. (2022). 5G in Africa: realising the potential. GSMA.

Strengths

Young and digitally skilled population

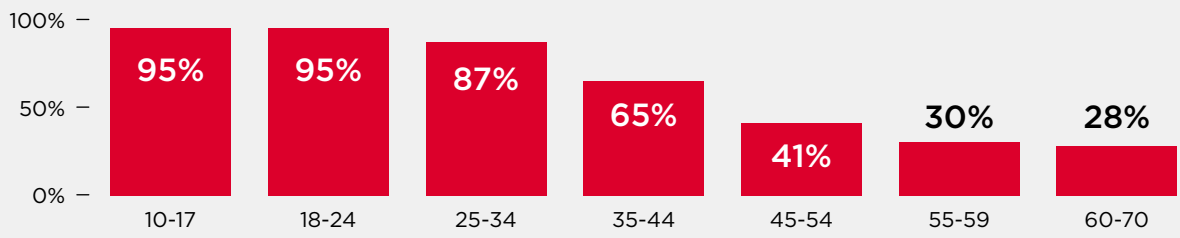
Digital skills of Tunisian youth

1 out of 4
Tunisian is below 15 years[1]

71% of Tunisians claim to use internet and **88%** use is every day[2]

Internet usage reaches almost **100%** of young Tunisians (below 24 years)

Internet usage in Tunisia by age group[3]



Source: 1. Word Bank, 2020; 2. Business News. (2019). Tunisie : les femmes sont plus connectées que les hommes; 3. Managers. (2019). L'utilisation de l'internet en Tunisie en chiffres.

The vast majority of Tunisians use the internet daily, with internet usage among Tunisia's youth population at nearly 100%. Internet usage is sophisticated, with relatively elevated levels of digital literacy.[40]

40. Managers. (2019). L'utilisation de l'internet en Tunisie en chiffres. Accessed 5 February 2024.

Weaknesses

Regulation

Regulatory environment

	World Bank 2020	Network Readiness Index 2020 – Portulans Institute – sub criteria			
	"Doing Business" (score)	Regulatory quality	ICT regulatory environment	Legal framework adaptability to emerging technology	E-commerce legislation
Tunisia	68.7	42	74	30	75
Morocco	73.4	46	89	29	100
Algeria	48.6	24	58	46	50
Egypt	60.1	32	81	46	75
Jordan	69	53	85	49	75
Rwanda	76.5	53	83	45	75

Sources: 1. World Bank Doing Business 2020 2. Network Readiness Index 2020

While there has been some progress in recent years, **there remains plenty of scope for improvement in Tunisia's regulatory environment**. Government authorisation is required for companies to operate, creating barriers to entry, and regulations built to protect specific sectors have prevented the growth of digital platform companies. For example, ride-hailing platforms like Bolt had to enter the Tunisian market by partnering with existing taxi unions to operate.[41]

Policy reform on foreign exchange is also necessary, according to the business community. Tunisia has restrictive currency controls, which makes it difficult for digital platforms to collect payments from abroad and to scale abroad.

Regarding **regulations in the labour market**, the lack of policy hinders the development of the full potential of the digital platform economy and relevant stakeholders should be encouraged to adopt measures that support a temporary workforce.

Finally, while the Start-Up Act represents a positive step in the creation of an enabling environment for businesses in Tunisia, only a small share of Tunisian companies (0.07%) are start-ups and therefore benefit from recent improvements in the ecosystem. More work needs to be done at government level to develop a flourishing digital economy and to measure the contribution of digital platforms to the economic landscape. For example, according to a fintech platform:

> **"It took us six months to create the company. Too long! It was long to register with APII ('Agence de Promotion de l'Industrie et de l'Innovation). For a fintech, it is even more difficult because of specific regulations. You need to be highly motivated if you want to survive."[42]**

41. Platform Economy Stakeholder Interview.
42. Platform Economy Stakeholder Interview, Konnect CEO.

Weaknesses — Infrastructure

Payment and logistics infrastructure

Payment

17% of Tunisians have used a means of payment other than cash (card, cheque, bank transfer, etc.) at least once a month[1]

3% Tunisians have used a financial service on a mobile[2]

0 MNOs are registered as "établissement de palement" and offer mobile money

Logistics

	Logistics Performance Index (LPI) – World Bank (2018)						
	Overall LPI score	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Timelines
Tunisia	2.57	2.38	2.1	2.5	2.3	2.86	3.24
Morocco	2.54	2.33	82.43	2.58	2.49	2.51	2.88
Algeria	2.45	2.13	2.42	2.39	2.39	2.6	2.76
Egypt	2.82	2.6	2.82	2.79	2.79	2.72	3.19
Jordan	2.69	2.49	2.72	2.44	2.44	2.77	3.18
Rwanda	2.97	2.67	2.76	3.39	3.39	2.75	3.35

Sources: 1. Enquête Nationale sur l'inclusion financière, BCT/Ministère des Finances/Altai Consulting; 2. Ibid.

E-payment usage remains extremely limited in Tunisia. This is notably due to a lack of card ownership and distrust in e-payment systems, in part because current regulations make it difficult for customers to recover their money in case of fraud. Cash on delivery remains the prevailing model in Tunisia, which undermines the efficiency and profitability of digital platform models.[43]

While Tunisia has 22 banks active in the country, only 17% of adults use other forms of non-cash payment. Women are also less likely to be financially included, with only 29% of women reported to have an account at a financial institution in 2021.[44]

Overall limitations on digital payments are a struggle for digital platforms. According to a start-up in Tunisia:

> "We would have liked to offer our IoT products where clients could subscribe to the service, but it is impossible to implement direct debits with a long-term commitment (the products are simply not offered by banks)."

> "We had to make payments annually to avoid going through the invoicing and payment collection processes every month. Recurring card payments are difficult." [45]

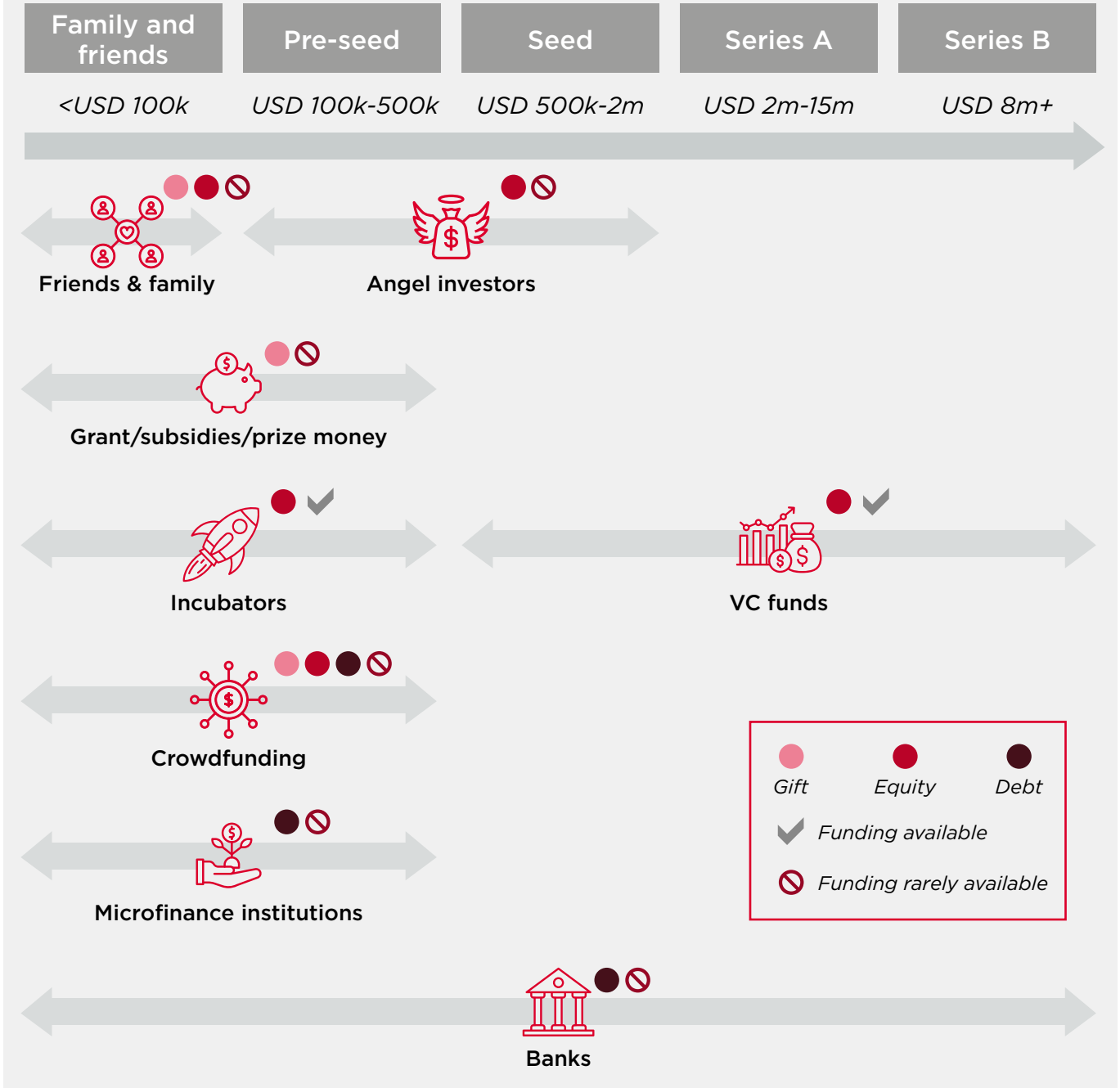
43. For an example of cash-on-delivery cost computation, see: PakistanToday. (2020). The True Cost of Cash on Delivery (COD) (accessed 5 February 2024).
44. FinDevGateway. (n.d.) Financial Inclusion in Tunisia. Accessed 9 February 2024.
45. Platform Economy Stakeholder Interview, Be Wireless Solutions.

The use of bank cards increased significantly at the end of September 2022 by 24% in number and 28% in amount to reach 100 million and TND 16.6 million, respectively. Since the launch of mobile payment in June 2022, nine payment service providers (seven banks and two payment service banks) have joined the mobile switch which allows interoperability and facilitates communication between different payment service providers.

Logistics services in Tunisia have historically been a monopoly of La Poste Tunisienne. New actors, such as Aramex, have entered the market, but La Poste remains the main player and benefits from a monopoly on some types of delivery. Improvements in the logistics infrastructure and delivery services (e.g., sending parcels directly to customers rather than requiring collection at a post office) are required to further support the development of the digital platform economy model.

Weaknesses — Access to funding

Funding types for Tunisian start-ups



Source : Altai Consulting analysis, based on key informant interviews and secondary research: Managers. (2019). Les business angels: la pièce manquante du puzzle du financement des sartups en Tunisie?

Tunisia has experienced growth in start-up funding in recent years, ranking eighth in Africa in terms of funds raised since 2019.[46] Local and international venture capital funds are deploying capital with funds supported by the Anava fund of funds such as 216 Capital and Silicon Badia, and an increasing number of international VCs are taking an interest in Tunisian start-ups and tech platforms. There remains, however, a shortage of funding for early-stage start-ups. While some venture capital-backed accelerator programmes such as Flat6Labs invest in exchange for minority stakes in the start-ups and digital platform economy models they support, other sources of funding are scarce. Financial institutions in Tunisia are often unwilling to take the risk to invest in start-ups, relying on investment from families and friends.

For example, according to a growth stage start-up that started in Tunisia:

> **"We do not talk with local investors, they do not understand anything to international potentialities. It is challenging legally speaking to expand abroad once you have Tunisian investors."**

Investors need to request authorisation from the Central Bank (BCT) for all investment operations, which is often time consuming.

Recent regulation on crowdfunding and tax incentives for angel investors in the Start-Up Act could help to improve the funding environment.

Opportunities

Commitment from ecosystem stakeholders

Stakeholders from across the ecosystem have increasingly demonstrated their willingness to contribute to the development of an enabling environment. For example:

- The **government** has recently passed major pieces of regulation to create a more enabling regulatory framework, including the Start-Up Act, BCT sandbox, regulation on *établissement de paiement* or payment service banks, *Loi de auto entrepreneur*, etc. These regulations will be operational once the final decrees are passed; this includes the publication of a list of permitted activities and the implementation of an online registration platform by the Ministry of Vocational Training and Employment. According to one fintech founder:

> **"The Central Bank of Tunisia sandbox[47] is a great initiative, allowing us to try and demonstrate our solutions within a framework that make sense. We have regulations, consultants to assist us, KPIs to monitor and a certain perimeter on which we can try our solution. And now it is for us to demonstrate what we can do. That could be implemented in all administrations and ministries, health, transport, for the elections, etc." [48]**

- **Donors** spent more than $1 billion in net official development assistance for Tunisia in 2021,[49] which is a major opportunity for the country in tech programmes if the money is spent on sustainable programmes and building capacity locally.

- MNOs are open to invest in the development of mobile money payment infrastructure and are willing to embed platform services into their own service offer. A 132% mobile penetration rate in the country provides favourable ground for the deployment of mobile financial services that can provide solutions for the unbanked population, such as independent professionals, smallholder farmers, SMEs and micro businesses. The Central Bank of Tunisia has responded to this potential by offering preliminary authorisation for mobile operators to launch their payment establishment. While financial inclusion numbers in Tunisia remain low, MNOs are tackling the usage gap and improving the number of mobile users in the country covered by the network. GSMA studies have revealed a 42% usage gap in the country

46. Africa: The Big Deal. Accessed 5 February 2024.
47. BCT Lab. Accessed 5 February 2024.
48. Platform Economy Stakeholder Interview.
49. World Bank. (2019). Net official development assistance and official aid received (current US$). Accessed 9 February 2024.

caused by users' lack of internet mobile phone ownership or lack of digital skills to use the internet. Several mobile operators in the country are taking steps to address this issue through digital literacy campaigns.[50] MNOs are also increasingly interested in engaging with the local tech ecosystem by offering a variety of programmes targeting start-ups and tech entrepreneurs such as Orange Fab accelerator or the Ooredoo Experience Centre in Tunisia.[51]

- **Associations and foundations** such as ELIFE[52] are launching programmes to train the most disadvantaged groups on digital skills and ensure their participation in the emerging digital platform economy space.
- **Universities** have upgraded their curriculum to include courses on entrepreneurship and IT skills, and organise pitch challenges and networking sessions with ecosystem stakeholders.[53]
- **Tech hubs/incubators** are developing in the country, providing additional services such as funding (e.g. Flat6Labs) and enabling incubators outside across the country to make the ecosystem more inclusive and create a pipeline for talent.[54]

Opportunities

A mature Tunisian diaspora

The Tunisian diaspora is well established, particularly well-educated Tunisians living in Europe, North America, and the Gulf. According to the Office des Tunisiens a l'etranger, the total number of Tunisian talents working abroad is 7,243 (4,193 living in Europe, 1,609 in North America and 1,226 in Arab countries).[55] This represents a clear potential market for Tunisian digital platform economy companies such as tele-medicine platform Tobba.tn. In addition, some in the diaspora are engaged in the creation of new digital platform economy companies, while others are willing to invest or fund Tunisian-based ventures.

The launch of venture capital funds in the country and the examples of recent start-up exits by diaspora founders can encourage this trend.

50. Tunisie Telecom. Programme Ichmilni de Tunisie Telecom. Accessed 8 February 2024.
51. GSMA. (2023). The GSMA Mobile Connectivity Index. Accessed 5 February 2024.
52. Tunisia Foundation For the Development. Accessed 5 February 2024.
53. Platform Economy Stakeholder Interview.
54. Flat6Labs. Accessed 5 February 2024.
55. Office des Tunisiens à l'Etranger. Accessed 9 February 2024.

Threats Political instability

There are several factors affecting political instability in Tunisia. **Since the 2011 revolution, Tunisia has experienced 12 changes of government and several political crises**,[56] which may have delayed the reforms required.

Additionally, the public administration sector is exceptionally large and employs more than 654,000 people.[57] This sector is resistant to change, especially towards digitisation. E-services are not well developed, and most administrative platforms do not work properly. For start-ups, working with public entities remains a challenge:

> "For reference, it is important to work for public clients, but we try to reduce the number of projects to the minimum."

There is a lack of trust in the private sector and public actors will always prefer to opt for a call for tenders.

> "The only projects that we can work on are the projects financed by international donors,"
> according to one start-up founder interviewed.[58]

One fintech founder interviewed also states that:

> "Users and companies are very old-fashioned and not that keen to change, we need to make things as simple as possible for them. By changing this system and making it easier and faster for everyone, we will contribute to a better economy for Tunisia: traceability, transparency, tax compliance, etc. The way for change is simple, we need all players to convince ministries of finance and technology that they need to ease things."

Threats Resistance of historical players

The Tunisian economy has often been characterised as an *économie de rente* (windfall economy),[59] with a high number of monopolies and oligopolies in key economic sectors. Traditional players may not favour the changes that the digital platform economy can bring, as these changes could weaken their market position.

According to a ride-hailing platform:

> "It is difficult to get a taxi license in Tunisia, which can take up to 15 years. There is a limited number of drivers allowed to work on the ride-hailing platforms and platforms such as ours compete to attract them. Drivers easily switch platforms and competition is harsh. Because they have to offer high prices to attract drivers, these platforms can only serve upper-class customers. There are only 20,000 taxi licenses delivered in Tunis, 50% of them are 50 years old or more, so approximately 5,000 to 6,000 drivers are likely to work on digital platforms."[60]

56. France 24. (2021). Tunisie : dix ans après, une instabilité politique et des crises à répétition. Accessed 5 February 2024.
57. République Tunisienne Ministère des Finances. (2022). Loi des Finances 2022. Accessed on 8 February 2024.
58. Platform Economy Stakeholder Interview, Be Wireless Solution.
59. WebManagerCenter. (2020). Nouveau modèle de développement: La guerre contre l'économie de rente est vitale pour la Tunisie. Accessed 5 February 2024.
60. Platform Economy Stakeholder Interview with a prominent ride-hailing platform.

Threats

Creation of (foreign owned?) oligopolies/monopolies

The development of oligopolies/monopolies could threaten or discourage new market entrants. This could have a particularly negative socio-economic impact if monopolistic or oligopolistic companies are foreign-owned and potentially discourage local innovation due to the fierce competition it would induce.[61]

Threats

Downward pressure on earnings, working conditions, social protection, etc, for digital labour platforms workers

The development of digital labour platforms could drive down wages and conditions. On these platforms, the supply (i.e., workers offering their workforce) often exceeds the demand. This tends to put downward pressure on all workers in terms of earnings, working conditions, employment status, access to social protection/ unemployment benefits, etc. It is therefore crucial that the government properly regulates the sector to ensure workers of the platform economy are protected.[62]

For the country manager of a platform, given the high unemployment rate in Tunisia, many people would be willing to work for such platforms:

> **"When we post an offer to recruit 50 drivers, we receive 200 applications, and we must refuse many people. It is really the opposite of what we see with taxi drivers. Yet, some platforms have taken advantage of the driver's situation, but in Tunisia, we can see what happened in other countries and avoid doing the same mistakes. We need to design strict social regulations."[63]**

Interested parties and digital platforms should create a group of interest to push for the liberalisation of the logistics sector and provide specific advantages to taxi drivers such as fuel subsidies and tariffs to level the playing field. There is a lack of specific legal framework for multi-sided transport platforms.

> **"We were neither a transport company, neither an IT company. They gave us a status that is not really adapted to our business and prevents us from receiving some specific benefits," according to one start-up founder of a logistics platform interviewed.[64]**

61. OECD. (1999). Policy Roundtables Oligopoly.
62. See: https://fair.work/en/fw/homepage for more details on the specific risks inherent to digital labour platforms and potential mitigation strategies.
63. Platform Economy Stakeholder Interview, Yassir.
64. Platform Economy Stakeholder Interview, eFret.

Threats — Decreasing customer protection standards

According to SEVAD (Syndicale Nationale du E-Commerce et de la Vente à Distance), 50% of sales on e-commerce platforms in Tunisia are informal. This increases the risk of fraud for consumers.[65]

The founder of tech platform Fulfillment Bridge hails SEVAD's efforts to mitigate this fraud issue:

> **"The group is performing good work despite their limited resources. Working in e-commerce space has given them firsthand knowledge of the issues and solutions, yet their political influence and means are insufficient, leaving their recommendations unheard. One of their projects, the 'label de confiance,' a list of 50 criteria with 10 mandatory items, aims to increase trust in e-commerce. However, due to the prevalence of informal e-commerce on social media platforms and related issues, people remain sceptical. Their efforts have inspired SEVAD to propose an e-commerce act for start-ups with the label de confiance, which could support the industry by providing flexibility for serious companies, such as offering a currency account for those generating currency revenues."** [66]

Threats — "Brain drain" of talented entrepreneurs and engineers

Numerous young Tunisian graduates have moved abroad in search of better jobs and salaries. A similar phenomenon also exists with digital platform economy models, many of which are created by Tunisians abroad or start operating in Tunisia but end up moving abroad, notably when they need to raise funds. This brain drain is limiting the expansion of Tunisia's platform economy, and skills are becoming scarce in some specific areas.

65. Platform Economy Stakeholder Interview, SEVAD.
66. Platform Economy Stakeholder Interview, Fulfillment Bridge.

Annex 2: Stakeholder interview list

Name	Position	Organisation
Afef Boulares	Manager	Orange Fab
Ahmed Zoghlami	CEO	IDARTY
Alaya Bettaïeb	Managing Director	Smart Capital
Amel Saidane	CEO & Co-Founder	BetaCube / President of Tunisian Start-ups
Ameni Mansouri	Co-Founder & CEO	Dabchy
Ameni Rahmani	Previous Manager	Tunisian Start-ups
Amira Guermazi	Former Advisor to the Minister of Higher Education and Scientific Research	Tunis Business School - Ministry of Higher Education and Scientific Research
Anis Ben Arbia	CEO	Educanet
Bilel Darnaoui	CEO	Monetique Tunisie
Chaker Slaymi	Director	Université Centrale (Collective Lab)
Charfeddine Yakoubi	President	Association Tunisienne des Contrôleurs Publics
Chiraz Seini	Branch Office Manager	Amen Bank
Cyrine Sanchou	Previous CEO	MNO Payment Establishment
Elyes Jeribi	Previous CEO	Jumia Tunisia
Emna Kharouf	President	ATUGE
Esma Ennaifer	Executive Director CSR & Communication Orange MEA	Orange Africa & Middle East

Stakeholder interview list (Continued)

Name	Position	Organisation
Ezzeddine Zagrouba	Managing Director	Centre National des Technologies en Education (CNTE)
Habib Toumi	Directeur Général	CNSS
Haroun Aouni	Director, Innovation Lead	Amen Bank
Hassen Harrabi	Previous Advisor to the Minister	Ministry of Information and Communication Technologies
Haythem Cherif	Country General Manager, Tunisia	Yassir
Hichem Ben Fadhl	Founder	Tledger
Houda Ghozzi	CEO	Open Start-up Tunisia
Ikram Makni	General Director	CCIS
Imene Atallahl Andoulsi	Director	Orange
Issam Essefi	Founder	Big deal
Kais Sellami	President of the Fédération Nationale des TIC, General Director at Discovery Informatique	Discovery Informatique, Fédération Nationale des TIC, Conseil National Stratégique de l'Economie Numérique
Kamel Saadaoui	Directeur Général	Centre National D'informatique
Karim Kharrat	CEO & Chairman	Be Wireless Solutions
Khabbab Hadhri	Directeur du Développement du E-Commerce	Ministère du Commerce - Tunisie
Khaled Ben Jilani	Senior Partner	Africinvest
Khaled Echehm	Conseiller Référent en Entrepreneuriat - Creation de microentreprises à Médenine et Tataouine (CMMT)	Agence Nationale pour l'Emploi et le Travail Indépendant
Khalil Talbi	Président	UTICA - SEVAD (Chambre Syndicale Nationale du Commerce Électronique et de la Vente à Distance)

Stakeholder interview list (Continued)

Name	Position	Organisation
Lofti Darragi	CEO	RBK
Maher Kallel	Fondateur et Président	Carthage Business Angels
Maya Jerbi	President	Orange Fondation
Mehdi Al Batti	Public Sector Specialist	WB
Mehdi Djait	Senior Manager	Orange
MISHRA Sunil	CMO	Ooredoo
Mohamed Abbes	Senior Director Regulatory Affairs	Ooredoo Tunisie
Mohamed BEN AHMED	Managing Director	STMicroelectronics
Mohamed Frikha	Managing Director	Telnet
Mohamed Malouche	Public Sector Lead Partner	Deloitte
Mondher Ben Ayed	CEO	TMI
MONDHER GAM	CEO & Founder	Online Network Security
Mounir Mouakhar	President	CCITUNIS
Mustapha Ben Ghachem	Head of Innovation	Ooredoo
Naceur Ammar	Directeur	Esprit / Prisitini School of AI
Najoua Kooli	Team Leader	GIZ Tunisia
Noaman ben Abdessalem	B2B Director	Ooredoo
Noomen Fehri	CEO	Our Digital Future / Former Minister of ICT

Stakeholder interview list (Continued)

Name	Position	Organisation
Olfa Souli	Directeur Général	Direction Générale de la réforme administrative
Rafaa Houarbi	Directeur	Tunisie Telecom
Rim Bellahsinne Cherif	Directrice	Tunisie Telecom
Sabrine Ibrahim	CEO	Class Quiz
Salma Baghdadi	Start-up Ecosystem Director	Smart Capital
Selima Dziri	Head Of Marketing Communication	The DOT
Sinda Ben Salem	Senior Product Lead	InstaDeep
Soukaina Rahmani	Innovation Manager	Tunisie Télécom
Tarek Lassadi	CEO	Traveltodo
Thameur Hemdane	Fintech entrepreneur - Founder of Afrikwity & Cofundy	Afrikwity / Cofundy
Thouraya Daouas	CEO	La Tortuga
Wassel Berrayana	Founder and CEO	Proxym IT
Wassim Jouini	Cofounder	Proservy
Yasser Bououd	Founder and CEO	Ezzayra
Yassine Oussaifi	Partner	AfricInvest
Yehia Houry	Managing Director	Flat6Labs
Youssef Bechaouch	Director of CSR	Orange
Youssef Fennira	Directeur ILO	Ministère de la Formation Professionnelle et de l'Emploi

Stakeholder interview list (Continued)

Name	Position	Organisation
Zahra Ben Nasr	President	FACE Tunisie - Les entreprises contre l'exclusion
Zakaria Belkhodja	Previous Economic Advisor	Government of Tunisia
Zeineb Messoud	Director	The DOT
Zied Kacem	President	Association Victoire pour Femme Rurale
Zohra Gaddes	Founder & CEO	Math Universe
Zoubeir Chaieb	President du conseil	aetech-solutions
Adnane Lachheb	Public Affairs Manager	Glovo
Ahmed Rouached	Operations Manager	Yassir
Chahloul, Aymen	National Coordinator Tunisia	International Labour Organization
Kais Sanchou	CEO Tunisia	Jumia
Lamia Rahal	Director of Public Policy and Government Affairs, North Africa	Yassir
Aida Lamloum	Occupational Safety and Health Specialist	International Labour Organization
Na Eun Mun	Project Officer	International Labour Organization
Rafik Benabes	Country Manager Tunisia	Bolt
Salima Mekki	Operations Manager Tunisia	Bolt

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