

**The impact of self-entrepreneurship on social inclusion in the era of digitalization: what role for business incubators in Algeria?****BERBAR Mouloud**

Lecturer A, DEFI Laboratory, Faculty of Economic, Commercial and Management Sciences, Mouloud MAMMERI University of Tizi-Ouzou, Algeria.

[mouloud.berbar@ummto.dz](mailto:mouloud.berbar@ummto.dz)**SEBAA Ahmed Salah**

Lecturer A, DEFI Laboratory, Faculty of Economic, Commercial and Management Sciences, Echahid HAMMA Lakhdar University of El Oued, Algeria

[sebaa-ahmedsalah@univ-eloued.dz](mailto:sebaa-ahmedsalah@univ-eloued.dz)**OUCIF FAIZA Kheireddine**

Lecturer A, DEFI Laboratory, Faculty of Economic, Commercial and Management Sciences, University of Ghardaia, Algeria.

[ouciffaiza.kheireddine@univ-ghardaia.edu.dz](mailto:ouciffaiza.kheireddine@univ-ghardaia.edu.dz)**Kelthoum FERHAT**

Department of Economics, University of El Oued, Algeria

[Kelthoumferhat@gmail.com](mailto:Kelthoumferhat@gmail.com)**Ridha ZEHOUANI**

Department of Management, University of El Oued, Algeria

[zehouani-ridha@univ-eloued.dz](mailto:zehouani-ridha@univ-eloued.dz)**Abstract**

The Algerian entrepreneurial ecosystem has experienced since 2022, a new actor, institutionally constituted, namely, the self-entrepreneur. This novelty arrives in a period characterized by the preparation of a digital transition, in which the economy would take increasingly digitalized and socially inclusive approaches.

In this communication, we will attempt to carry out an analysis on two actors, namely the self-entrepreneur and business incubators, in a cooperative approach, which can give rise to innovative co-construction initiatives in the service of social inclusion in Algeria.

Our research leads to the result that business incubators can play an accelerating role and the success of the self-entrepreneurship approach, through personalized support, to support social inclusion through digital inclusion.

**Keywords:** Self-entrepreneurship, social inclusion, business incubators, innovative co-construction, Algeria.

**Introduction**

Economic growth depends on several parameters, which condition economic activity at the macro and micro levels. In recent years, the emergence of the digital economy has highlighted the predominance of information as a factor in distinguishing economies and competitiveness of companies, thus causing a revolution in the entrepreneurial sphere. This logic leads us to specify that entrepreneurship today is not limited to combining factors of production to offer goods and services, but to capturing information and making profitable use of it.

In Algeria, in the face of digital changes, a market has developed, whose development is accelerating thanks to the use of ICT and the corresponding methods; this reality is conducive to the initiation of activities that can be the subject of self-employment and favorable to the success of the digital transition.

Self-employment is an institutional and conventional understanding of entrepreneurship; it is a concept developed through empirical reflection, aimed at combating unemployment and enabling the professional integration of young people; it corresponds to a public policy of support for employment.

Systemic reviews on the social impact of entrepreneurship show that it contributes to driving economic and social well-being, but only conditionally. This impact varies depending on the type of entrepreneurship, the context, and the institutions involved (Neumann, 2020; Scartozzi et al., 2024). It includes empowerment, the integration of groups excluded from economic life, institutional change, and inclusive regional development (Scartozzi et al., 2024). On an individual level, self-employment increases job satisfaction, and to life in general (Abreu et al., 2019). Transitions to self-employment also lead to gains in mental and sometimes physical health, beyond just income, which is considered to the creation of non-monetary added value (Nikolova, 2019).

Algeria launched its self-employment scheme in 2022 through the Ministry of Digital Economy, Startups, and Micro-Enterprises, initially offering seven sectors of activity and allowing for others to be added. This scheme benefits from a digital approach, enabling prospective self-employed individuals to register directly on the dedicated platform. Through this platform, they will obtain their self-employment card, which serves as proof of their registration in the national register of self-employed individuals. The stakes of self-employment are multiple; it engages all actors of the entrepreneurial ecosystem on one side, and the social ecosystem on the other. Indeed, self-employment is characterized by its impact in terms of social inclusion, by the fact that it offers disadvantaged people the opportunity to engage in entrepreneurial activity, and to constitute a source of financing.

The stakeholder approach allows us to understand self-employment, particularly through the fact that relationships with SMEs and support structures such as business incubators can lead to a co-construction approach aimed at establishing increasingly integrated social inclusion within the economic and social sphere. In this presentation, we will attempt to demonstrate *how self-employment and business incubators, through a cooperative approach, could establish an innovative co-construction process to promote social inclusion in Algeria.*

Two hypotheses underlie this research work, the first stipulates that self-employment, combined with support from business incubators, constitutes a lever for action to promote the social inclusion of young people by offering them economic opportunities adapted to recent digital changes.

The second hypothesis of our research assumes that the exploitation of information and communication technologies within the framework of the self-employment scheme in Algeria constitutes a key factor in driving entrepreneurial dynamics, by facilitating not only the emergence of new economic actors, but also by optimizing the social and professional satisfaction of self-employed individuals, while strengthening their inclusion in the economic and digital ecosystem.

To address our research question, we will first attempt to define the conceptual framework of self-employment. We will then relate this concept to that of innovation by proposing a matrix to characterize the corresponding situations. We will also review the resources that support self-employment, before dedicating time to reflecting on the self-employment system in light of the Algerian context. Finally, we will highlight the role of business incubators in a collaborative approach that fosters social inclusion.

**1. Elements of definition and characteristics of the self-employed**

The definition of a self-employed individual is no different from that of an entrepreneur; the latter corresponds to a specific category of economic agent, characterized by their leadership role. They are distinguished above all by their dominant market position, which differentiates them from followers and subordinate individuals. Their particular strength lies in their ability to mobilize and combine diverse resources in innovative ways. (Facchini, 2007), from this, we can deduce that the self-employed person is an actor who carries out an activity for his own account and while being alone, in order to make a profit, while seizing an opportunity and valuing knowledge and know-how.

In this sense, Elifneh (2015) suggests that self-employment should be driven by a desire to seize or create economic opportunities, motivated by necessity, and by a lack of prospects. According to ABDELNOUR (2014), it is a tool for combating unemployment, while also being considered a measure to promote entrepreneurship. To develop the main characteristics of the self-employed, we have carried out a targeted theoretical synthesis based on those of the entrepreneur, and which we have deemed applicable to the self-employed, this is the ability to anticipate and manage one's prudence, if we duplicate it on the self-employed, we will arrive at an important characteristic namely, their ability to anticipate their actions, because these are dependent on the changes taking place in their environment (digital transition, etc.). Anticipation will allow the self-employed to substitute for the means (material and financial) that a classic entrepreneur is supposed to have to carry out his activity; this is, among other things, a risk management measure.

The second characteristic can be derived from empirical and contextual reflection, according to which the policy aimed at promoting self-employment occurs in an era intensive in high-tech and a digital economy based increasingly on information and data. Data can constitute a competitive advantage for the self-employed individual and at least one factor in their success. In this sense, Boutillier (2015) argues that information is the essential element of economic functioning. Indeed, economic actors make their decisions without having complete knowledge of the choices made by other agents.

Information is the main resource of the self-employed person; it promotes their flexibility and highlights their missions and approach; while projecting them towards a future of growth and development.

**co -construction approaches**

It is clear that the self-employed individual is an actor in the entrepreneurial ecosystem of a country; the speed of growth of the number of self-employed individuals in each country informs us about the dynamics, at least cyclical and structural, of this status.

This reality leads us to develop reflections on the characterization of the role of the self-employed in terms of socio-economic influence; indeed, self-employed individuals offer services that SMEs/SMIs cannot offer effectively, such as personal services with personalized methods, including home and online training, software usage support, personalized coaching, personalized business engineering, etc.).

Self-employment offers positive externalities to other businesses, by acting as an intermediary with consumers and users, by finding outlets for the services and goods offered by SMEs, traders and craftsmen, the work of delivery drivers, digital developers of marketing platforms, are examples of the externalities offered by self-employed individuals. It is nevertheless important to emphasize that the interaction between self-employed individuals and other actors in the entrepreneurial ecosystem depends on certain conditions such as entrepreneurial education, Vergnies (2017) suggests that the latter depends on a common genius between the actors involved through their mediations. The self-employed can also offer their services directly to SMEs; indeed, SMEs are guided by a cost logic, meaning that the costs required by the self-employed are significantly lower than those imposed by the employability of an employee, with the compensation they generate within the company when recruited; this is a form of subcontracting.

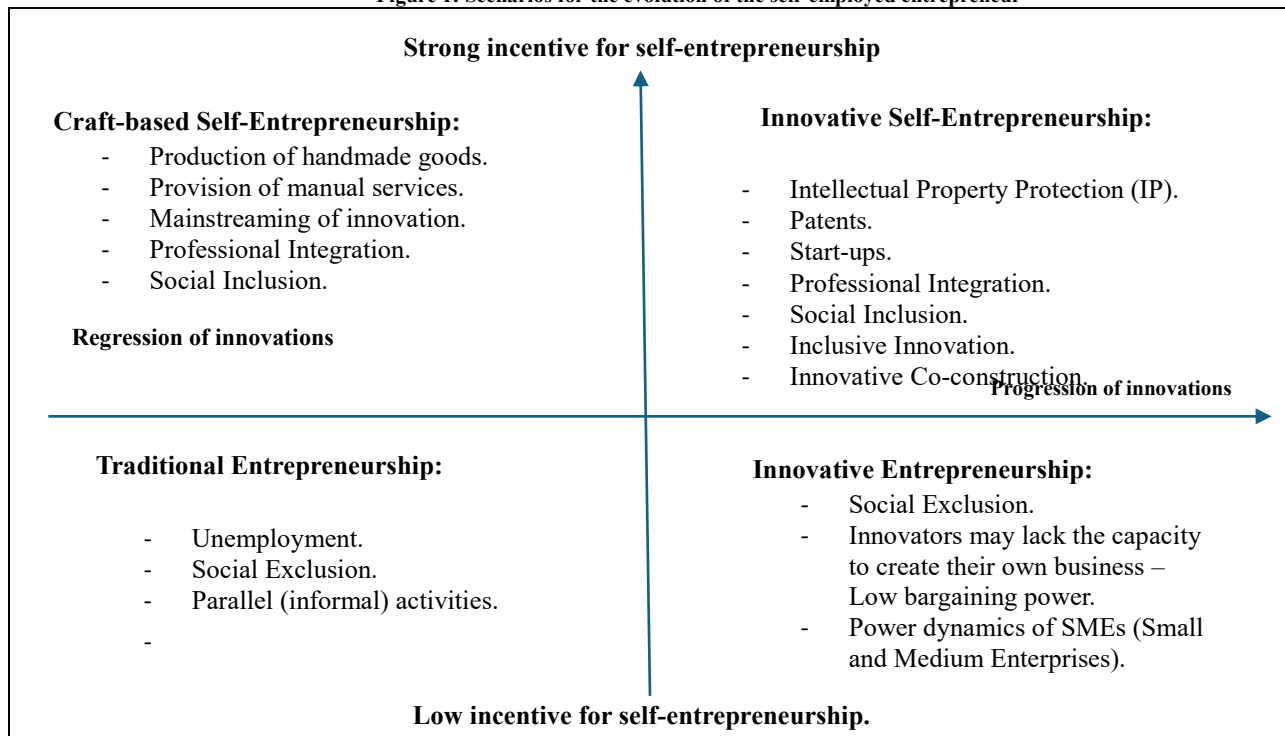
In this sense, Pereira and Fayolle (2013) specify that co - construction and collaboration can take place between self-employed individuals by developing a network while intervening on different objects.

**3. Self-employment and innovation: a matrix relationship serving social inclusion**

The relationship between innovation and self-employment may appear linear and positive; however, it is heavily weighted by the resources allocated to encourage innovation on the one hand, and on the other by the intensity of public policies in charge of promoting self-employment. To explain our thinking, we will attempt to illustrate this relationship using two criteria: the level of incentive for self-employment and the level of acceleration of innovations.

Combining these two criteria would lead to four scenarios, as presented in the figure below:

**Figure 1: Scenarios for the evolution of the self-employed entrepreneur**



Source: compiled by the authors.

The first scenario in this matrix would be a situation in which unemployed young people face an environment with strong incentives for self-employment but low innovation intensity. This situation would lead them to gravitate towards skilled, craft-intensive trades producing goods and services. Self-employed craftspeople would then face market changes with increasingly fierce competition. The impact on unemployment would not be positive, as job placement would be limited to artisans who have already proven themselves in the market.

A weak incentive for self-employment coupled with a low intensity of innovation would lead to social exclusion and an increased level of unemployment, a situation in which companies do not change their strategic line, preserving their monopoly position. This scenario also occurs when faced with a saturation of innovations, particularly when little investment is made in research and development; a scenario which would be summarized as a weakness of competitiveness at the national and international level.

The third scenario is characterized by an intensity of innovations faced with a weakness of incentive for self-employment, which can be summarized by the emergence of innovative entrepreneurship, which would leave little chance for young graduates, bearers of innovative ideas to realize a business project, they will in fact be excluded from the entrepreneurial ecosystem, or subject to a negotiating power in favor of the SME/SMI that would be interested in their innovative ideas and projects.

The final scenario corresponds to a situation where individuals operate within a socio-institutional environment that encourages self-employment (undertaking a project independently) and innovation. This situation translates into the possibility of developing innovative ideas while having the opportunity to transform them into wealth-creating projects, all within a digital economy increasingly based on data. Innovative self-employed individuals will be able to develop patents, which can then lead to the launch of startups or, ultimately, innovative companies. In this sense, social inclusion would be accompanied by co -creation among project leaders, resulting in a ripple effect, as it would encourage young graduates not only to create their own businesses but also to offer increasingly innovative solutions. These four scenarios are dynamic, insofar as they are written within a continuum, because the variables of dispersion are moving, and therefore one scenario can converge towards another.

**4. Digital technology and digitalization: two renewable resources to support self-employment**

It is accepted that ICTs have a significant socio-economic impact, insofar as they facilitate access to information, which would translate into economic development. This correlation is valid in developing countries and those with low incomes; in this respect, Lechman & Kaur (2016) advocate that ICTs are influenced by socio-economic factors of the country, and in turn, societies with a level of social development promote technical progress.

The contribution of ICTs to development is characterized by disparities between countries, in the sense that they are adopted and mobilized differently; however, these authors specify that training can be considered a factor that can contribute to economic development ( Jimenez et al., 2013).

One of the distinguishing factors of self-employment is the use of the internet to carry out related activities and tasks. Indeed, in both French-speaking and English-speaking countries, this type of self-employment emerged during periods characterized by a significant level of ICT use, particularly the internet. This is the case in Algeria. Moreover, the Algerian platform dedicated to self-employment offers activities that fully or partially utilize digital data (the internet). This can be explained not only by an inclusion policy but also by the rise of the digital economy, which has given birth to a multi-level virtual market (fintech, e-commerce, digital marketing, digital developers, etc.), with platforms playing an accelerating role, such as social networks. In 1990, the total number of people using the internet worldwide was around 2.69 million, although web use was limited to certain countries.

**Table 1: Number of people using the internet**

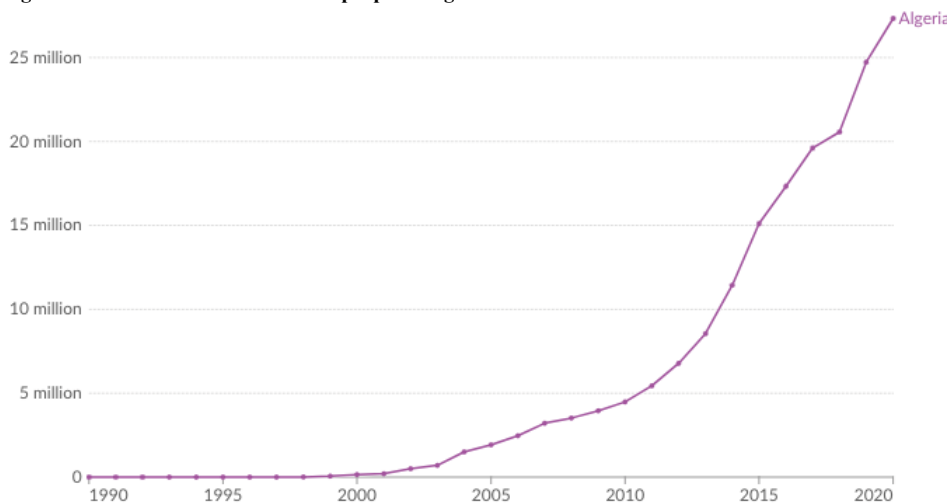
	1990	2020
USA	1.95 Million	305.37 Million
United Kingdom	49976	63.58 Million
Japan	25101	113 Million
Australia	99747	23 Million
Germany	99921	74.84 Million
Russia	/	123.77 Million

Source: <https://ourworldindata.org/grapher/number-of-internet-users?tab=map>, accessed on 13/11/2024.

The number of people using the internet in 2020 exceeded 4.69 billion people; these figures tell us about the increased level of web use in the daily lives of individuals, it can thus be considered a resource, predisposed to be used for self-employment.

It is clear that these figures differ from one country to another; in Algeria, as shown in the graph below:

**Figure 1: Evolution of the number of people using the internet between 1990 and 2020**



Source: <https://ourworldindata.org/internet>, accessed on 13/11/2024.

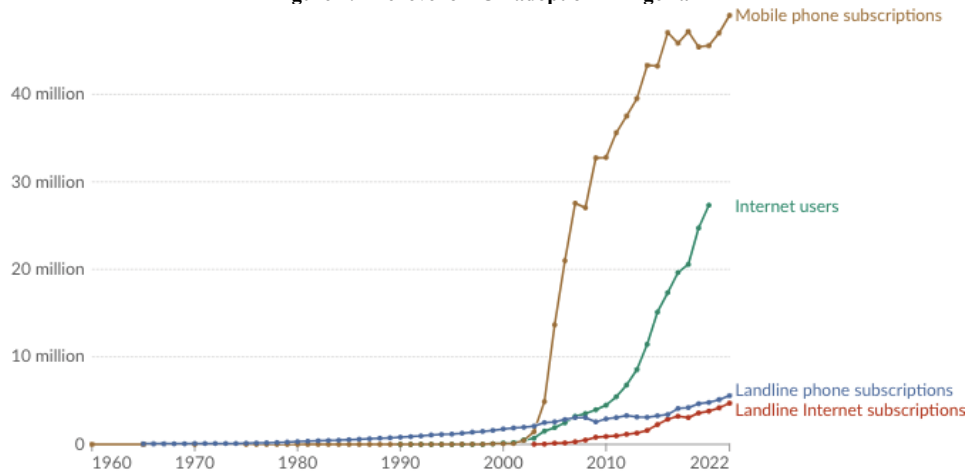
Internet usage is an indicator that allows us to assess the impact on socio-economic behaviors and their evolution over time, while also analyzing the impact on economic growth.

Through the figure, we can see the growth of internet use in Algeria. We can distinguish two phases: the first, between 1994 and 2010, is marked by a slow growth in usage; the second, between 2010 and 2020, is characterized by a rapid growth in internet use. It was around 4.48 million users in 2010 and reached 23.83 million in 2020. This can be explained by the efforts made in this area to build a society with access to digital technology.

This analysis informs us about contemporary trends in Algerian society, and the impact on technological, economic, and social factors.

This evolution is characterized by changes in communication methods, access to information, economic opportunities and the ever-increasing scope of a digital market, which require digitalization strategies; it is, among other things, a digital and entrepreneurial ecosystem that requires intensive ICT activities; for this purpose, self-employment activities find a place to be formally established.

**Figure 2: The level of ICT adoption in Algeria**



Source: <https://ourworldindata.org/internet>, accessed on 13/11/2024.

The graph above informs us about the level of ICT adoption in Algeria, based on three or four factors. The first element that attracts our attention is the predominance of mobile phone subscriptions, which have grown rapidly over the last twenty years, reaching 49.02 million subscriptions in 2024. The second mode of ICT use is internet use, which was around 27.33 million in 2020, whereas the number of users in 2004 was around 1.51 million. These figures continue to increase. The analysis of ICT adoption in Algeria informs us of the existence of a digital foundation conducive to the development of self-employment, thus broadening the scope of intervention for young people in the context of self-employment activities.

These figures also raise questions about the existence of a lucrative digital market, which can be satisfied by personal or personalized services; this is a key factor for the success of self-employment in Algeria.

## 5. Self-employment in Algeria: what is the reality?

### 5.1. The status of the Algerian self-employed

The status of the self-employed in Algeria is established through Law No. 22-23 of 24 Joumada El Oula 1444 corresponding to December 18, 2022 concerning the status of the self-employed.

According to this law, a self-employed person is defined as a natural person who carries out a paid activity alone that falls within the professions authorized for this status, provided that their annual turnover does not exceed a certain amount, set by the law in force.

This text defines who can benefit from self-employed status in Algeria. It specifies that a self-employed individual is someone who works independently and engages in an income-generating activity. However, this activity must be among those authorized by the regulations for self-employed status. Furthermore, to qualify for this status, the self-employed individual's annual turnover must not exceed a specific threshold, which is determined by current legislation. This limits the tax and administrative advantages of this status to small businesses.

This definition, the status of self-employed is relative from the moment that it is dependent on the activities which will be the subject of an individual project, and on the turnover achieved, it is an institutional framework aimed at protecting the status of the self-employed.

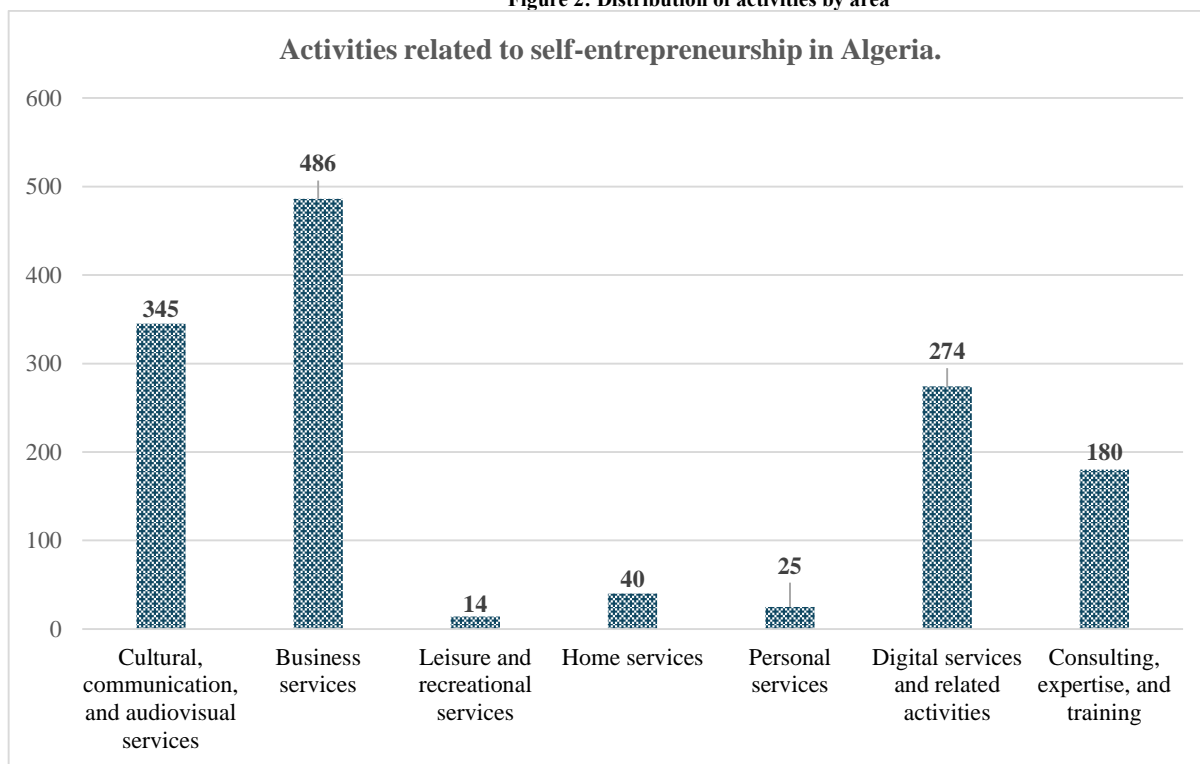
The self-employed status offers the possibility for a project leader or service provider to carry out their functions at home or in common spaces, such as coworking spaces offered by business incubators.

### 5.2. Self-employment activities in Algeria

Self-employment activities are established in such a way that there is professional inclusion, in the sense that all professions will be marked out by this system, the figure below illustrates the seven (07) areas concerned by self-employment and in which young people can register in the national register of self-employment.

Each field has a number of activities that can be the subject of a self-employment project; the figure below illustrates the number of activities per field.

Figure 2: Distribution of activities by area



Source: compiled by us using data from ANAE (<https://activities.anae.dz/>, accessed on 14/11/2024).

The sector with the most activities is that of services provided to businesses, with 486 activities, the second largest is the sector grouping cultural, communication and audiovisual services, with 345 activities, personal services and those provided to businesses, have respectively 25 and 14 activities.

The system for managing the national register of self-employed individuals is distinguished by its dynamic nature, meaning that activities are not definitively stopped, but are predisposed to expand, by opening up the possibility of proposing activities directly on the ANAE website. This is an inclusive approach, since a person who cannot find an activity that corresponds to their profession and/or training can propose an activity that suits them, the proposal of which is subject to validation by an ANAE commission. This approach would serve other people who wish to register in the activity in question.

## 6. Self-employment and business incubators: what externalities for what co-construction?

The self-employment scheme is an emerging and promising approach, which can be supported, particularly by business incubators (both university and private). These structures play a catalytic role in a co-construction approach, jointly with self-employed individuals and SMEs/SMIs, acting as mediators to integrate self-employed individuals into the ecosystem dedicated to self-employment.

The use of entrepreneurial support is justified for several reasons, but essentially by the risk factor faced by the innovative project leader; indeed, the intensity of risk in the context of a start-up is all the higher because the project leader, before seeking to make his investment profitable, seeks to assess the risk in order to arrive at a quantifiable dimension and to opt for a proven positioning strategy (Sahut, Peris-Ortiz, Teulon, 2019).

The logic of social inclusion can be propelled by business incubators, by supporting young graduates in launching social entrepreneurship projects.

In this sense, business incubators could be structures that promote digital inclusion, Williams (2019) It specifies in this regard that this would help to strengthen the social inclusion of disadvantaged people.

Whatever definition one may give to a self-employed individual and whatever their field of activity, support This remains a condition for its success. Thus, the start-up is embedded in an ecosystem composed of resources, stakeholders, and a legal framework designed to lay the groundwork for its success.

Entrepreneurship training plays a crucial role in the success of self-employment. Pepin and Champy-Remoussenard (2017) draw our attention to the fact that "education for" programs, such as those related to sustainable development, highlight the limitations of the traditional education system, which remains focused

on teaching academic subjects. According to them, this approach neglects equally crucial learning related to values, attitudes, social skills, and current social issues, such as ecological crises and challenges related to citizenship and employability (Pepin and Champy-Remoussenard, 2017).

Entrepreneurial support is a concept that predates self-employment. Indeed, this approach relies on indicators that form a more or less standardized model. This is because a traditional company has a known and stable business model, unlike a self-employed individual who may be searching for one. The person with the idea must test various strategies and actions to arrive at a value proposition that could form the basis of a future business. Therefore, there is no pre-established, certified model specifically designed to support self-employed individuals. This observation highlights the need to adapt the philosophy of support for self-employed individuals and the corresponding measures.

### Conclusion

Self-employment is a particular form of entrepreneurship, it involves a specific entrepreneurial process, and digital resources including the internet and other ICT modalities, which requires specific and digitalized support.

It is clear that self-employment would lead to social inclusion and a decrease in unemployment; however, it is essential to accompany the process with intensive innovation efforts in order to achieve digital inclusion, conducive to a digital transition that creates added value and has a positive impact on GDP.

University incubators can indeed play a catalytic role, as they are linked to research laboratories, from which the incubator can draw innovative services that can serve the self-employed. We can conclude on this subject that the support of self-employed individuals is based on an integrated approach; it involves soliciting all actors directly or indirectly involved in the entrepreneurial and digital ecosystem.

It is also worth emphasizing that incubators can equip self-employed individuals with the predispositions conducive to their conversion to start-up, and benefit from the advantages offered in this regard, in terms of protecting innovations, through the possibility of obtaining the start-up or innovative project label.

### Bibliographical references

1. Abreu, M., Öner, Ö., Brouwer, A., & Leeuwen, E. (2019). Well-being effects of self-employment: A spatial inquiry. *Journal of Business Venturing*. <https://doi.org/10.1016/j.jbusvent.2018.11.001>
2. ABDELNOUR S. (2014), « L'auto-entrepreneuriat : une gestion individuelle du sous-emploi », *Nouvelle Revue du travail* [en ligne], n 5 : <http://nrt.revues.org/1879>, consulté le 13 octobre 2017. DOI : [10.4000/nrt.1879](https://doi.org/10.4000/nrt.1879)
3. Boutillier, S. (2015). L'entrepreneur et la dynamique du changement dans la théorie économique. *Marché et organisations*, n° 23(2), 145-170. <https://doi.org/10.3917/maorg.023.0145>.
4. Décret exécutif n° 23-198 du 5 Dhou El Kaâda 1444 correspondant au 25 mai 2023 fixant le modèle de la carte de l'auto-entrepreneur.
5. François Facchini. L'entrepreneur comme un homme prudent. *La Revue des Sciences de Gestion*, 2007, 226 - 227, pp.29-38. [ff10.3917/rsg.226.0029ff](https://doi.org/10.3917/rsg.226.0029ff). fhal-00270443f
6. Jean-Frédéric Vergnies, 2017 "Edito : L'entreprise, solution à la crise ?", *Formation emploi*, 140, 1-2.
7. Jimenez, Nancy; Najjar, Lotfollah; Qureshi, Sajda; and Haworth, Dwight, "Information and Communication Technologies Effects on Economic Growth" (2013). *Information Systems and Quantitative Analysis Faculty Proceedings & Presentations*. 32. <https://digitalcommons.unomaha.edu/isqafacproc/32>
8. Loi n° 22-23 du 24 Joumada El Oula 1444 correspondant au 18 décembre 2022 portant statut de l'auto-entrepreneur.
9. Lechman, Ewa & Kaur, Harleen, 2016. "Social development and ICT adoption. Developing world perspective," *MPRA Paper* 69354, University Library of Munich, Germany.
10. Matthias Pepin et Patricia Champy-Remoussenard, « Introduction », *Formation emploi* [En ligne], 140 | octobre-décembre 2017, mis en ligne le 31 décembre 2017, consulté le 30 octobre 2020. URL : <http://journals.openedition.org/formationemploi/5191> ; DOI : <https://doi.org/10.4000/formationemploi.5191>.
11. Neumann, T. (2020). The impact of entrepreneurship on economic, social and environmental welfare and its determinants: a systematic review. *Management Review Quarterly*, 71, 553 - 584. <https://doi.org/10.1007/s11301-020-00193-7>
12. Nikolova, M. (2019). Switching to self-employment can be good for your health. *Journal of Business Venturing*. <https://doi.org/10.1016/j.jbusvent.2018.09.001>
13. Pereira, B. et Fayolle, A. (2013). Confiance ou défiance, le paradoxe de l'auto-entrepreneuriat. *Revue française de gestion*, N° 231(2), 35-54. <https://shs.cairn.info/revue-francaise-de-gestion-2013-2-page-35?lang=fr>.
14. Sahut, J., Peris-Ortiz, M. et Teulon, F. (2019). Les start-up et PME à forte ou hyper croissance : comprendre les enjeux et les raisons de leur performance. *Revue de l'Entrepreneuriat/ Review of Entrepreneurship*, Vol. 18(2), 7-19. <https://doi.org/10.3917/entre.182.0007>.
15. Scartozzi, G., Delladio, S., Rosati, F., Nikiforou, A., & Caputo, A. (2024). The social and environmental impact of entrepreneurship: a review and future research agenda. *Review of Managerial Science*, 19, 1041 – 1072, <https://doi.org/10.1007/s11846-024-00783-9>
16. Williams, J. (2019). *A phenomenological study of the lived experiences of social housing residents in relation to their digital exclusion*, Faculty of Commerce, Graduate School of Business (GSB). Retrieved from <http://hdl.handle.net/11427/32314>
17. Workeferahu Elifneh, Y. (2015). What Triggers Entrepreneurship? The Necessity/Opportunity dichotomy: a retrospection, *Journal of Poverty, Investment and Development*, An International Peer-reviewed Journal Vol.15. <https://www.iiste.org/Journals/index.php/JPID/article/view/24879/25482>.
18. <https://ourworldindata.org/grapher/number-of-internet-users?tab=map>, consulté le 13/11/2024.
19. <https://ourworldindata.org/internet>, consulté le 13/11/2024.
20. <https://ourworldindata.org/internet>, consulté le 13/11/2024.
21. <https://activities.anae.dz/>, consulté le 14/11/2024.