

# Tapping into Romania's Competitive Advantage to Attract Digital Nomads

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#### Abstract

In the Covid pandemic context, attracting digital nomads became a fearful competition between states. We believe that Romania has an untapped potential to become one of the top receiving countries in the EU for digital nomads. Therefore, this paper is the first to analyze how Romania can become an important European attraction for digital nomads. More specifically, we try to respond to three questions: (i) what Romania's potential is to attract digital nomads compared to other EU 27 member states; (ii) what regions in Romania have the highest potential to attract digital nomads; and (iii) what cities have untapped potential to accommodate significant numbers of digital nomads.

To perform the analysis, we use available data from Eurostat and Numbeo regarding the cost of living and rent, internet and broadband access, restaurant and groceries price index, and crime and safety index. Then, we rank Romania against other EU 27 Member States based on those indicators. We also perform cluster analysis of Romanian regions considering available data at regional data on internet and broadband access. Further on, we select the cities with the lowest cost of living and rent from those regions.

The analysis confirmed that Romania has an unexploited potential to attract digital nomads, considering the main criteria they are using to select their country of destination: internet access, cost of living, and safety. Romania has one of the highest Internet speed and broadband coverage in the EU27 and the lowest cost of living and rent. The Bucharest-Ilfov, West, North-West, and Center regions have the best internet and broadband access. Inside these regions, Arad, Oradea, Sibiu, and Timisoara cities showcase the lowest cost of living and rent.

In conclusion, we recommend that the Romanian Government should improve its information and communication channels with potential digital nomads and cut red tape.

#### Keywords

digital nomads, migration, remote work, telecommuting, labour market.

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#### Introduction

The development of information technology and the widespread use of the internet have driven a flexible work style that offers the possibility of working remotely, ensuring a balance between professional performance and personal satisfaction, blurring the boundaries between work and leisure, between work and personal space (Dery, Kolb and MacCormick, 2014). The concept of flexible working has been conceptualized in different ways as flexible or non-standard work arrangements (Wood and de Menezes, 2007), schedule flexibility (Dumas and Perry-Smith, 2018), remote working (Martínez Sánchez, et al., 2007), compressed working time (Facer and Wadsworth, 2008) or reduced hours (Kossek and Lee, 2008).

Our paper focuses on the digital nomads' perspective of working from home as professionals who migrate to work remotely. Although Makimoto and Manners (1997) initially promoted the term digital nomad in "Digital Nomad" 25 years ago, there is still no clear definition of the term digital nomad in the scientific literature. However, the general acceptance is that it refers to young individuals, such as millennials or



Generation Z. They usually have more flexibility due to a certain period of life and combine virtual work with travel (Reichenberger, 2018; Wiranatha et al., 2020).

Romania recently adopted a visa for digital nomads. Romanian Law number 22/2022 defines digital nomads. Therefore, a digital nomad is a foreigner who has an employment contract signed with a company outside Romania and provides services using ICT. Or he can be a foreigner who owns a company in another country, to which he provides services using ICT.

The decision of the digital nomads to choose a destination country is influenced by several important factors such as the cost of living and accommodation, the availability of adequate facilities such as internet access, transport, digital banking, entertainment, visa restrictions, security, and business communities (Wang, et al., 2019).

Digital nomads work in various fields, including information technology, education training, consulting, coaching and research, sales, marketing, PR, and creative services (Wang, et al., 2019). These professions can be conducted remotely using digital tools and the internet.

According to nomadlist.com, one of the world's most prominent digital nomads' communities and reference websites for digital nomads worldwide, Romanian cities appear to be not so attractive. As of March 2022, Bucharest was situated in 37<sup>th</sup> place, Timisoara in the 38<sup>th</sup>, Cluj in the 51st, and Brasov in the 55<sup>th</sup>, behind cities in Portugal (Lisbon in the first place and Porto in the third place), and Warsaw (19<sup>th</sup> place). However, according to the Digital Nomad Index (Circleloop, 2021), Romania ranked third place in the world, after Canada (first place) and the United Kingdom (second place).

Romania has adopted a welcoming attitude towards digital nomads and facilitates the conditions for remote workers. Recently, the Parliament adopted the legislation regarding the visa granted to "digital nomads," so Romania joins the countries that offer visas to foreigners who want to work remotely. The main advantage of the digital nomad visa is the period that the holder can spend in a country - 12 months, compared to most visas that are valid for only three months. According to the substantiation note accompanying the law proposal on digital nomad's visa, by introducing the digital nomad visa, Romania is expected to attract at least 2000 digital nomads, that are likely to spend around 2000 Euros per month, which could bring around 50 million Euros to the Romanian economic sector.

Therefore, this research aims to analyze how Romania can become an important European attraction for digital nomads. Romania was chosen for the analysis for two reasons. Firstly, the Romanian Parliament showed interest in putting Romania higher on the digital nomads' list by adopting the digital nomads' visa. Furthermore, Romania has a high potential to attract nomads because it has one of the best increases in the internet infrastructures globally, a reduced cost of living, and its cities are secure. Moreover, last but not least, digital nomads that decide to stay and work in Romania can reverse the effects of brain drain in the long term.

For the scope of this analysis, we considered factors of attraction for digital nomads when choosing future destinations: the cost of living (Thompson, 2019), internet connectivity (Richards, 2015; Green, 2020; McElroy, 2020), socioeconomic conditions (Wang, et al., 2019).

### **1.** Review of the scientific literature

It is generally acknowledged that the presence of digital nomads positively affects local economies through (i) consumption by paying for services and facilities in the country where they live and not in the country of their employer (Richards, 2015), (ii) advertising for tourism (Wiranatha et al. 2020), (iii) innovative ideas and the transfer of knowledge and know-how to local actors (Gast, Werner and Kraus, 2017), (iv) jobs created (), and (v) the networks they develop and coworking spaces (Richards, 2015; Wang et al. 2019).

Digital nomads are limited in choosing the place of business to the areas where their technologies can function correctly. Internet access, whether in broadband or mobile data, is important to digital nomads at the highest possible speeds. Tools such as strong Wi-Fi connections are a filter in the choice of spaces.

Although digital nomads move on their own, one of the attraction factors is the existence of nomadic communities. The coworking and co-living spaces provide digital nomads with the tools they need and provide the necessary infrastructure (Wang, et al., 2019). These coworking spaces serve as a place where freelance creative workers are often "fashionable." Nomadic workers tend to look for places that provide the necessary resources, such as workspaces that allow them to feel like members of a community or coworking offices with security and maintenance included (Spreitzer, Cameron and Garrett, 2017). At the



same time, coworking spaces respond to the need for socialization of "collaboration, openness, community, accessibility, and sustainability" (Capdevila, 2015).

Nonetheless, the choice of destination is directly influenced by the living environment (lack of crime, social peace) and the availability and efficiency of the medical system to ensure that, if needed, they can find the care they need (Wiranatha et al., 2020).

# 2. Research methodology

Digital nomads tend to move from one place with a higher cost of living to another with a lower cost of living. Therefore, the cost of living (Thompson, 2019) correlated with the alternatives of living are among the most important criteria in choosing the destination. In addition, the need for socializing and networking makes the existence of a community also an important factor (Bloom, 2018).

To analyze the possibility of Romania becoming an attractive destination for digital nomads, we started our work with a comparative analysis of the EU countries regarding access to the internet, cost of living, and safety index. The primary purpose of this step was to compare Romania with the other EU countries and the average of EU countries using the main characteristics that help digital nomads choose the country to live in for a short period. Next, we shifted the focus to the macro-regions and cities from Romania. The focus of this analysis was to highlight the best regions/ cities that digital nomads can choose. We used the same data and approach described in the previous step for the second part of our analysis. The only difference is that the comparison has been made between regions/ cities.

We have used hierarchical cluster analysis for the region classification based on internet and broadband access. The primary purpose of this approach was to identify the regions which form the cluster with the highest internet access. This way, we can further focus on the cities inside these regions to identify the most appealing ones for digital nomads. The main output of the hierarchical cluster analysis is the dendrogram. This represents a tree diagram frequently used to illustrate the arrangement of clusters produced by the hierarchical grouping.

• Data from this study were obtained from Eurostat and Numbeo. From Eurostat, we used the variables related to internet access, while Numbeo was used for the data regarding the cost of living and safety indexes. Numbeo is a free database where users can easily compare the cost of living worldwide. To collect data, Numbeo relies on user inputs and manually collected data from authoritative sources (websites of supermarkets, taxi company websites, governmental institutions, newspaper articles, other surveys, etc.). These indices are established in relation to New York City (NYC). This means that for New York City, each index should be 100 (%). If for instance, a European city has a rent index of 120, this translates into rents 20% more expensive in that city than in NYC. On the other hand, if a European city has a rent index of 70, it means that in that city rents are 30% lower than in NYC. The baseline values are for 2022. The missing data for Cyprus have been replaced with the average of the EU not to influence the results of the comparative analysis. The indicators with missing data are the cost of living and the other indexes from the Numbeo database.

The main variables included in the analysis are:

- level of internet access, as a percentage of households with internet access;
- access to the internet at home, as a percentage of households with internet access at home;

• the cost of living is a relative indicator regarding the prices of consumer goods, such as groceries, transportation, restaurants, and utilities. The cost of living index does not comprise accommodation expenses (like mortgage or rent).

• rent index that is an estimation of prices of renting apartments in the city compared to New York City;

• cost of living plus rent index that is an estimation of consumer goods prices including rent compared to New York City;

• groceries index that is an estimation of grocery prices in the city compared to New York City;

• restaurant price index that is a comparison of prices of meals and drinks in restaurants and bars compared to NYC;

• local purchasing power index captures the relative purchasing power regarding buying goods and services, in a specific city, related to the average net salary that is in that city;



• the crime index captures the total crime level in a specific country or city. We apply the following scale of crime levels: lower than 20 is considered very low, between 20 and 40 is considered low, between 40 and 60 is considered moderate, between 60 and 80 is considered high, and crime levels that are higher than 80 are considered as very high;

• safety index is an indicator that is measured as opposed to the crime index. A city with a high safety index, is found as very safe.

# 3. Results and discussion

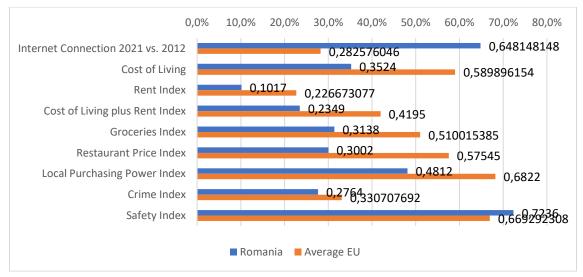
## 3.1. The untapped potential of digital nomads

Romania has a vast potential to become the European Union's highest attraction for digital nomads worldwide. Romania offers more easily accessible coworking spaces that inspire digital nomads to work. The internet connection is good, cheap, and reliable, mainly because the Internet infrastructure was built on optic fiber upfront. In addition, Romania offers a lower-cost one-person lifestyle (Graph no. 1) that is probably not so well known by potential digital nomads worldwide. In The Digital Nomad Index 2021 (Circleloop, 2021), Romania ranked third, after Canada and the United Kingdom, on top of the work attractiveness from home mainly due to the increased speed of the internet connection and cheap cost, with an average broadband internet speed of 188 Mb / s, an internet cost of 7.5 euros and a rent of approximately 323 euros for a studio.

# **3.2. Findings of the analysis**

Romania has one of the highest potentials in EU 27 to attract digital nomads. Our comparative analysis between Romania and the average EU 27 countries showcases a clear competitive advantage for Romania regarding the cost of living and rent, internet connection, restaurant and groceries price index, and other indicators and indexes presented in section 2. Research Methodology and showcased in Graph 1 below. Anne 1 includes a more detailed table with the findings for all the countries included in the analysis.

Romania has the higher growth rate regarding access to the internet, with approximately a 65% increase in 2021 compared to 2012. Therefore, the internet connection in 2021 compared with the 2012 indicator is calculated as a report between the number of households with internet connection in 2021 and the number of households with internet connection in 2012.



Graph no. 1. Comparison between Romania and EU27 average regarding the indicators reflecting digital nomads 'interests

### Source of data: Authors' analysis based on Eurostat and Numbeo database

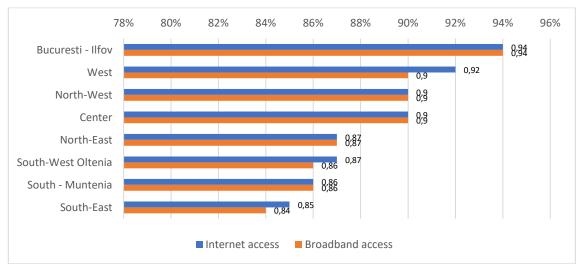
When analyzing the cost-of-living indexes, we observe that Romania ranks 1<sup>st</sup> if we consider the cost of living plus rent index (23,5%) in EU 27, followed closely by Bulgaria. However, the results are significantly lower than the average of the EU (42%) and far away from countries such as Luxembourg, Ireland, and Denmark, with the cost of living higher than 60%.



Romania also showcases the lowest indexes in terms of groceries and restaurant prices, other indicators that digital nomads usually look at when choosing their destination country. Finally, regarding the local purchasing power index, Romania is the fifth country in EU 27, after Greece, Malta, Bulgaria, Portugal, and Croatia, and statistically significantly lower than average of the EU (68,2%).

Another important characteristic that influences the digital nomads' decision to favor a destination country is the safety of the respective place. Our analysis captures two indexes related to security: crime and safety index. As shown in Graph 1 above, Romania is in the top 10 safest countries in EU27, with better values than the EU average (crime index is 27,6% compared with 33,1% of EU27 average, and safety index is 72,4% compared with 66,9%).

Narrowing down our analysis, we shift the focus to the regional level inside Romania. The scope of the second step of our research is to identify the regions of the country that have the potential to attract more digital nomads. This will help determine the cities with the best internet connection and lowest living costs in Romania.



Graph no. 2. Ranking of Romanian regions based on Internet and Broadband connection

### Source of data: Author's analysis based on Eurostat data

Considering the internet and broadband access data available at the regional level, the Romanian regions have been grouped into three clusters: 1) Bucharest-Ilfov region, around Bucharest capital, 2) West, North-West, and Center cluster, and 3) the remaining four regions of the country: North-East, South-West Oltenia, South-Muntenia and South-East, as the last cluster. Based on the hierarchical clustering analysis, the first two clusters with Bucuresti-Ilfov, West, Nort-West, and Center regions appear to have the potential to attract more digital nomads, as they have the best internet and broadband connection.

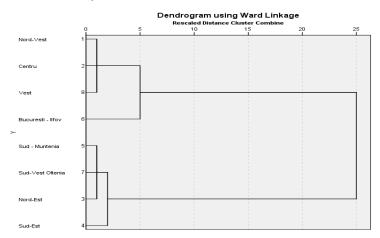


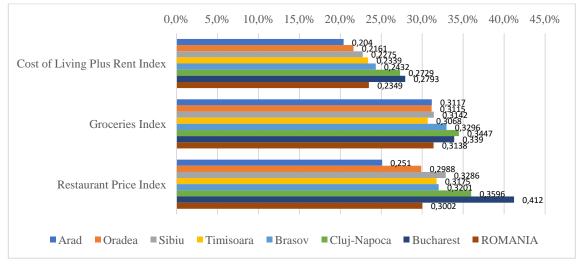
Figure no. 1. Region classification based on internet and broadband access

Source of data: Eurostat, 2021

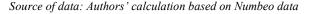


To select the most attractive Romanian cities for digital nomads, we ranked the tenth most important cities (where data was available). The four regions presented above are Arad, Oradea, Sibiu, Timisoara Brasov, Cluj-Napoca, Bucharest. The indicators used to rank the most attractive cities are the indicators where Romanian ranked first place in EU 27: the cost of living and rent index, the groceries index, and the restaurant index.

Based on the cost of living and rent index, the Romanian cities with the highest potential to attract digital nomads are Arad, Oradea, Sibiu & Timisoara. In these four cities, the cost of living is below the national average. The results are also similar if we look at the groceries index. Regarding the restaurant price, Arad and Oradea are below the national average, while Sibiu, Timisoara, and Brasov have slightly higher prices than the national average in Romania. Nomadlist.com ranks Timisoara in 39th place, closed to Romania's Bucharest capital (38th place). The city has an excellent total score, being marked overall as good by all nomadlist.com members that checked in. According to the website, you need 1403 dollars per month to live in the city, while based on the Numbeo database the required amount per month is 848 dollars. Brasov city is also ranked 53rd place on nomadlist.com with 1489 dollars per month to live in, compared with 876 dollars estimated on Numbeo. Arad, Oradea, and Sibiu are not promoted on nomadlist.com, but these cities have close estimated monthly costs (including rent) on Numbeo: 642, 729 respectively 771 dollars.



# Graph no. 3. Comparison between Romanian cities with the highest potential to attract digital nomads



### Conclusions

The analysis finds out that Romania has an untapped potential to attract digital nomads. Compared with EU 27 member states, Romania has one of the best internet and broadband access, with the lowest cost of living and the lowest prices for rent, groceries, and restaurants. Safety is also high compared with other EU27 countries. Four regions have the best internet and broadband access: Bucharest-Ilfov, West, North-West, and Center. Of these regions, four cities are the best to work in because of the reduced cost of living: Arad, Oradea, Sibiu & Timisoara.

Nevertheless, the analysis above is an excellent opportunity to put forward some suggestions on how to improve the attractiveness of Romania for the digital nomads around the world.

Our analysis shows asymmetry of information regarding the aspects where Romania has a proven competitive advantage to attract digital nomads, such as excellent Internet and Broadband access, the lowest cost of living, and very good safety. Romania needs to develop a centralized information center with a corresponding website to overcome this problem, mimicking the nomadlist.com website. Interested digital nomads could find general information about Romania's cities and regions and specific information about living and working conditions.

Last but not least, with a recently adopted legislation on digital nomad visas, Romania needs to develop a comprehensive system of cutting red tape that can become a barrier for digital nomads that want to work from Romania.



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#### References

- Bloom, L.B., 2018. 11 best places to be a digital nomad (and the 4 worst), [online] Forbes. Available at: <a href="https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/2018/10/30/11-best-places-to-be-a-digital-nomad-and-the-4-worst/#786050c8340a>">https://www.forbes.com/sites/laurabegleybloom/sites/laurabegleybloom">https://www.forbes.com/sites/laurabegleybloom/sites/laurabegleybloom</a>">https://www.forbes.com/sites/laurabegleybloom</a> (Accessed 15 March 2022].
- Capdevila, I., 2015. Co-Working Spaces and the Localised Dynamics of Innovation in Barcelona. *International Journal of Innovation Management*, [online] 19(03), p.1540004. https://doi.org/10.1142/S1363919615400046.
- Circleloop, 2021. *Circleloop*, [online] Available at: <a href="https://www.circleloop.com/">https://www.circleloop.com/</a> [Accessed 20 February 2022].
- Dery, K., Kolb, D. and MacCormick, J., 2014. Working with connective flow: how smartphone use is evolving in practice. *European Journal of Information Systems*, [online] 23(5), pp.558–570. https://doi.org/10.1057/ejis.2014.13.
- Dumas, T.L. and Perry-Smith, J.E., 2018. The Paradox of Family Structure and Plans after Work: Why Single Childless Employees May Be the Least Absorbed at Work. Academy of Management Journal, [online] 61(4), pp.1231–1252. https://doi.org/10.5465/amj.2016.0086.
- Eurostat, 2021. *Digital economy and society*, [online]. Available at: <a href="https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database">https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database</a> [Accessed 15 March 2022].
- Facer, R.L. and Wadsworth, L., 2008. Alternative Work Schedules and Work–Family Balance: A Research Note. *Review of Public Personnel Administration*, [online] 28(2), pp.166–177. https://doi.org/10.1177/0734371X08315138.
- Gast, J., Werner, A. and Kraus, S., 2017. Antecedents of the small firm effect: the role of knowledge spillover and blocked mobility for employee entrepreneurial intentions. *International Entrepreneurship and Management Journal*, [online] 13(1), pp.277–297. https://doi.org/10.1007/s11365-016-0403-x.
- Green, P., 2020. Disruptions of self, place and mobility: digital nomads in Chiang Mai, Thailand. *Mobilities*, [online] 15(3), pp.431–445. https://doi.org/10.1080/17450101.2020.1723253.
- Kossek, E.E. and Lee, M.D., 2008. Implementing a reduced-workload arrangement to retain high talent: A case study. *The Psychologist-Manager Journal*, [online] 11(1), pp.49–64. https://doi.org/10.1080/10887150801966995.
- Makimoto, T. and Manners, D., 1997. Digital nomad. New York: Wiley.
- Martínez Sánchez, A., Pérez Pérez, M., de Luis Carnicer, P. and José Vela Jiménez, M., 2007. Teleworking and workplace flexibility: a study of impact on firm performance. *Personnel Review*, [online] 36(1), pp.42–64. https://doi.org/10.1108/00483480710716713.
- McElroy, E., 2020. Digital nomads in siliconising Cluj: Material and allegorical double dispossession. *Urban Studies*, [online] 57(15), pp.3078–3094. https://doi.org/10.1177/0042098019847448.
- Numbeo, 2021. *Methodology and motivation for Numbeo.com*, [online]. Available at: <a href="https://www.numbeo.com/common/motivation\_and\_methodology.jsp">https://www.numbeo.com/common/motivation\_and\_methodology.jsp</a> [Accessed 15 March 2022].
- Reichenberger, I., 2018. Digital nomads a quest for holistic freedom in work and leisure. Annals of Leisure Research, [online] 21(3), pp.364–380. https://doi.org/10.1080/11745398.2017.1358098.
- Richards, G., 2015. The new global nomads: Youth travel in a globalizing world. *Tourism Recreation Research*, [online] 40(3), pp.340–352. https://doi.org/10.1080/02508281.2015.1075724.
- Spreitzer, G.M., Cameron, L. and Garrett, L., 2017. Alternative Work Arrangements: Two Images of the New World of Work. Annual Review of Organizational Psychology and Organizational Behavior, [online] 4(1), pp.473–499. https://doi.org/10.1146/annurev-orgpsych-032516-113332.
- Thompson, B.Y., 2019. The Digital Nomad Lifestyle: (Remote) Work/Leisure Balance, Privilege, and Constructed Community. *International Journal of the Sociology of Leisure*, [online] 2(1–2), pp.27–42. https://doi.org/10.1007/s41978-018-00030-y.
- Wang, B., Schlagwein, D., Cecez-Kecmanovic, D. and Cahalane, M., 2019. Digital Nomadism and the Market Economy: Resistance and Compliance. *ICIS 2019 Proceedings*. [online] Available at: <a href="https://aisel.aisnet.org/icis2019/future\_of\_work/future\_work/3>">https://aisel.aisnet.org/icis2019/future\_of\_work/future\_work/3></a>.



Wiranatha, A.S., Antara, M., Wiranatha, A.C., Piartrini, P.S., Pujaastawa, I.B.G. and Suryawardani, I.G.A.O., 2020. Digital Nomads tourism in Bali. *Journal of Development Economics and Finance*, 1(1), pp.1-16.

Wood, S. and de Menezes, L.M., 2009. *Family-Friendly, Equal-Opportunity, and High-Involvement Management in Britain.* [online] Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199547029.003.0028.

# Annex: 1

### Table no. 1. Detailed results of the analysis of each EU 27 country regarding the main indicators

	Internet Connection 2021 compared with 2012		Cost of Living		Rent Index		Cost of Living plus Rent Index		Groceries Index		Restaurant Price Index		Local Purchasing Power Index		Crime Index		Safety Index	
	%	Ranking	%	Ranking	%	Ranking	%	Ranking	%	Ranking	%	Ranking	%	Ranking	%	Ranking	%	Ranking
Austria	20,3%	16	71,0%	19	27,1%	21	50,5%	20	65,9%	24	66,0%	17	77,3%	18	23,7%	4	76,3%	4
Belgium	17,9%	20	72,6%	21	25,8%	18	50,7%	21	63,3%	20	78,6%	24	79,7%	19	44,0%	23	56,0%	23
Bulgaria	64,7%	2	38,4%	2	9,8%	1	24,6%	2	34,0%	3	32,4%	2	46,0%	3	38,5%	20	61,5%	20
Croatia	30,3%	12	48,9%	10	13,4%	6	32,3%	8	42,0%	9	41,3%	8	47,6%	5	24,7%	5	75,3%	5
Cyprus	50,0%	4	59,0%	15	22,7%	16	42,0%	15	51,0%	15	57,5%	15	68,2%	16	33,1%	15	66,9%	15
Czech Rep.	21,9%	15	48,2%	8	18,4%	12	34,3%	9	42,8%	11	36,7%	6	66,5%	15	25,5%	7	74,5%	7
Denmark	4,3%	26	84,1%	27	33,2%	24	60,3%	26	68,6%	25	98,8%	27	99,5%	26	25,1%	6	74,9%	6
Estonia	24,3%	14	53,7%	11	16,4%	10	36,2%	12	42,3%	10	56,4%	14	63,5%	14	23,1%	2	76,9%	2
Finland	11,5%	22	73,2%	22	26,0%	20	51,1%	22	65,2%	21	77,7%	23	91,0%	23	23,3%	3	76,7%	3
France	16,3%	21	74,1%	23	25,3%	17	51,3%	23	73,6%	26	71,8%	19	85,4%	21	46,8%	26	53,2%	26
Germany	8,2%	23	65,6%	16	27,6%	22	47,8%	17	52,3%	16	60,9%	16	103,1%	27	34,8%	17	65,2%	17
Greece	57,4%	3	56,2%	14	12,7%	5	35,8%	11	44,7%	12	52,2%	12	39,7%	1	40,3%	22	59,7%	22
Hungary	35,8%	9	40,7%	4	11,9%	4	27,2%	3	35,2%	4	32,8%	3	52,0%	8	35,1%	18	64,9%	18
Ireland	19,8%	18	76,1%	25	42,1%	26	60,1%	25	62,1%	19	80,4%	25	82,3%	20	45,4%	25	54,6%	25
Italy	44,4%	6	66,5%	17	20,6%	13	45,0%	16	58,0%	17	70,6%	18	61,7%	13	44,3%	24	55,7%	24
Latvia	31,9%	10	48,5%	9	11,8%	3	31,3%	5	38,4%	6	42,1%	9	51,7%	7	37,0%	19	63,1%	19
Lithuania	45,0%	5	45,7%	6	15,0%	8	31,3%	6	36,2%	5	46,6%	10	58,7%	10	33,1%	14	66,9%	14
Luxembourg	6,5%	24	80,5%	26	60,1%	27	70,9%	27	74,8%	27	88,8%	26	98,8%	25	33,4%	16	66,6%	16
Malta	18,2%	19	67,8%	18	29,7%	23	50,0%	18	59,6%	18	72,4%	20	44,2%	2	39,0%	21	61,0%	21
Netherlands	5,3%	25	75,7%	24	36,1%	25	57,1%	24	65,5%	22	76,4%	22	88,0%	22	27,6%	8	72,4%	8
Poland	31,4%	11	39,0%	3	14,5%	7	27,5%	4	32,4%	2	33,5%	4	60,0%	12	28,5%	10	71,5%	10
Portugal	42,6%	8	47,9%	7	20,7%	14	35,2%	10	39,0%	7	40,3%	7	46,8%	4	29,6%	12	70,4%	12
Romania	64,8%	1	35,2%	1	10,2%	2	23,5%	1	31,4%	1	30,0%	1	48,1%	6	27,6%	9	72,4%	9
Slovakia	20,0%	17	44,7%	5	16,1%	9	31,3%	7	39,7%	8	36,1%	5	54,7%	9	29,2%	11	70,8%	11
Slovenia	25,7%	13	53,9%	13	17,9%	11	37,0%	13	47,7%	14	46,7%	11	59,5%	11	21,1%	1	78,9%	1
Spain	43,3%	7	53,9%	12	21,3%	15	38,6%	14	45,7%	13	54,0%	13	70,0%	17	32,0%	13	68,0%	13
Sweden	1,1%	27	71,7%	20	25,9%	19	50,2%	19	65,8%	23	72,6%	21	98,1%	24	47,1%	27	52,9%	27
Average EU	28,3%		59,0%		22,7%		42,0%		51,0%		57,5%		68,2%		33,1%		66,9%	

Source: Author's analysis based on Eurostat & Numbeo database