Digital Nomadism as an Instrument for Sustainable Economic Growth

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Abstract. This study examines digital nomadism, an extreme form of flexible work in context of NewWork and overtourism, as a potential lever for sustainable economic growth. With the advent of the COVID-19 pandemic, remote work practices became widespread, presenting new dynamics within the workforce. Among the sectors most affected by the pandemic was tourism, which experienced a sharp decline due to travel restrictions, impacting economies heavily reliant on this industry. The research investigates whether developing a digital nomad ecosystem could provide an alternative economic pillar for traditional tourism hotspots like Portugal, Spain, and Thailand, promoting sustainable economic growth.

Keywords: Digital Nomadism, NewWork, Overtourism, Sustainabile Economic Growth.

1 INTRODUCTION

In recent years, digital nomadism as an extreme form of remote work as started to spread across the globe und thus gained attention by both press and academics. Characterized by individuals who leverage digital technologies to work remotely while traveling, digital nomadism intersects with concepts of sustainability in both work environments and tourism. [1] Digital nomads (DNs) are typically freedom-seeking individuals [2] who demonstrate strong entrepreneurial qualities and a potentially strong impact on the local economy. [3] DNs thus are an attractive target group for municipalities, which are starting to develop strategies to attract DNs to their communities. [4]

Nowadays there are growing concerns about sustainable economic practices. Sustainability, broadly defined, encompasses economic, social, and environmental dimensions. [5] In the context of work environments, sustainability entails creating conditions that support long-term well-being and productivity without depleting resources or harming ecological systems. [6] For tourism, sustainability involves promoting travel practices that are environmentally responsible, socially equitable, and economically viable over the long term. [7]

This study explores the sustainability implications of DNs and their economic potential, particularly focusing on Spain, Portugal, and Thailand.

DNs embody a unique confluence of these sustainability considerations. Their work patterns often emphasize flexibility, reduced physical infrastructure needs, and the potential for a decreased carbon footprint due to less frequent commuting. [8] Furthermore, DNs tend to favor destinations that offer a high quality of life, including robust digital infrastructure and environmentally sustainable practices, thereby

incentivizing host countries to adopt more sustainable policies. [9]

This study is guided by two primary research questions. The first examines the sustainability implications of DNs as a growing subset of the economy. Specifically, it investigates how digital nomadism can contribute to sustainable practices in both work and tourism sectors. The second explores the economic potential of DNs for Spain, Portugal, and Thailand. These countries have increasingly positioned themselves as attractive destinations for DNs, recognizing the potential economic benefits such as increased local spending, enhanced cultural exchange, and the attraction of a highly skilled workforce. The research questions were formulated as follows:

(1) What are the sustainability implications of DNs as a growing subset of the economy?

(2) What is the potential of DNs to contribute to (a) Spain's, (b) Portugal's and (c) Thailand's economy and SDG goal fulfilment?

2   METHODS

This study adopts a mixed-methods approach to investigate the impact of digital nomadism on tourism strategies, focusing on content and sentiment analysis of relevant literature, reports, and social media. Additionally, a multiple case study design is implemented to explore specific contexts in Spain, Portugal, and Thailand. The case study design follows guidelines provided by Yin [10], integrating both qualitative and quantitative methods to achieve comprehensive insights.

2.1   DATA COLLECTION

Next to academic material, tourism strategy papers from Spain, Portugal, and Thailand were collected. These documents were sourced from government publications, tourism boards, and industry reports. The focus was on understanding the strategic approaches these countries are adopting to attract and manage DNs. Social media channels frequently used by DNs, such as Instagram, Twitter, and Facebook, were selected for analysis. Hashtags and keywords relevant to digital nomadism and tourism strategies (e.g., #digitalnomad, #remotework, #travelstrategy) were used to gather data. Social media posts from the past three years were included to capture recent trends and sentiments.

2.2   CODING AND ANALYSIS

Content and sentiment analysis were conducted using MaxQDA, to ensure reliability, two researchers independently coded the data. Discrepancies were discussed and resolved to achieve consensus.

The content analysis focused of documents and website information provided by the governments and municipalities (e.g. strategies, actions plans, statistical information). Keywords and themes related to digital nomadism and tourism strategies were identified

and their frequences counted. In addition, official figures and statistics provided were integrated in the analysis. [11, 12]

Sentiment Analysis: The sentiment of the collected social media posts was analyzed to gauge the overall perception of DNs towards the tourism strategies of Spain, Portugal, and Thailand. [13, 14]

Following Yin's case study methodology [10], the research focused on Spain, Portugal, and Thailand. Data from literature, reports, and social media were triangulated to provide a comprehensive view of how each country is adapting its tourism strategies in response to digital nomadism. Each case study included:

Contextual Analysis: Background information on the tourism sector and the rise of digital nomadism in each country.

Strategic Response: Analysis of tourism strategies aimed at attracting DNs.

Impact Evaluation: Assessment of the effectiveness and impact of these strategies based on available data.

3 SELECTED RESULTS

3.1 CONTENT ANALYSIS - SUSTAINABILITY IMPACT

Focusing on sustainability impact, figure 1 below provides an overview of counts when it comes to comparing DNs to traditional tourists in a content analysis of tourism strategy and action plans from selected destinations. The structure of the comparison follows the three pillars of sustainability.

sustainability impact	digital nomads	counts	traditional tourists	counts
environmental	travel frequency and distance	77	nature preservation spending	34
	infrastructure and accommodation	64		
	local resource consumption	34		
social	seasonality / not overcrowding	65	culture offer consumption	52
	community integration	43	preservation of cultural heritage	34
economic	entrepreneurship	56	(daily) spending	65
	skill and knowledge transfer	43	job creation	32
	work practices and remote collaboration	31		

Figure 1. Sustainability comparison of DNs vs. traditional tourists (positive statement frequency counts)

As can be seen in figure 1, compared to traditional tourists DNs score positively in terms of travel frequency and distance, infrastructure and accommodation and local resource consumption. The reasons/reasoning provided is typically connected to the longer duration of the stay, local accommodation/mobility choices, reduced wastefulness and higher community integration. Traditional tourists, spend more money on average visiting and thus supporting and contributing to preservation of natural reserves. In the social dimension, DNs are seen as advantageous to the communities due to lower seasonality peaks and stronger community integration, with both a longer duration of stay, but also a different motives and goals stated for this difference. Traditional tourists,

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on the other side, again score with higher spendings on average.

Looking at the economic layer, DNs are perceived as entrepreneurs, with potential to add to the skill and talent pool as well as to transfer knowledge and skill. Traditional tourists help the local community by their spending and thus add directly and indirectly to job creation.

Resulting from the sentiment analysis, DNs are generally received quite positively in local communities, one fear that is frequently mentioned is the risk of housing costs rising as DNs typically rent and thus increase demand, creating a competition with locals. In discussions comparing DNs to traditional tourists, this argument is often offset with the comparison of private accommodation offered on short-time rental platforms such as Airbnb.

DNs are regarded as an attractive target group for e.g. destination marketing as they largely positively attributed, with key characteristics being:

DNs show social responsibility: DNs contribute to local economies and social causes through volunteer work, supporting businesses, and promoting sustainability, fostering global citizenship and awareness.

DNs are entrepreneurial: The digital nomad lifestyle encourages entrepreneurship, with many DNs creating and sustaining new ventures. This stimulates local innovation and economic growth through knowledge exchange and business partnerships.

DNs help building infrastructure: DNs drive improvements in infrastructure, such as reliable internet and co-working spaces, benefiting both themselves and local residents, thereby supporting economic and social development.

DNs contribute to the local community: DNs actively integrate into local communities through social interactions and collaborative opportunities, fostering cultural exchange and creating a supportive community environment.

In addition, the digital nomad lifestyle enhances self-efficacy through the development of self-motivation, adaptability, and resourcefulness, inspiring local communities to pursue independent and entrepreneurial endeavors.

3.2 POTENTIAL SDG IMPACT COMPARISON – SPAIN, PORTUGAL AND THAILAND

Figure 2 provides an overview of the situation in the three case countries when it comes to comparing the potential of utilising a DNs strategy as instrument of sustainable economic growth, contributing to SDG goal achievement.

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Spain	Portugal	Thailand	SDG-Goal
		X	1: No Poverty
		X	2: Zero Hunger
X	X		3: Good Health and Well-being
		X	4: Quality Education
			5: Gender Equality
XX			6: Clean Water and Sanitation
X			7: Affordable and Clean Energy
X	XX	X	8: Decent Work and Economic Growth
XX	X		9: Industry, Innovation and Infrastructure
		X	10: Reduced Inequality
XXX	X		11: Sustainable Cities and Communities
X	XX	XX	12: Responsible Consumption and Production
	X	X	13: Climate Action
			14: Life Below Water
			15: Life on Land
			16: Peace and Justice Strong Institutions
	X		17: Partnerships to achieve the Goal

Figure 2. Potential of using a DNs Strategy to improve SDG in Spain, Portugal and Thailand

The potential impact is indicated by "X" entries in the first three columns. The number of "X" represents the potential strength of contribution, with this rating also impacted by the importance within the communities, stemming e.g. from the social media sentiment analysis. While there are obvious similarities between the cases, it is the local challenges which provide for a key difference in the perception and discussion of DNs. For example, key problems in many of the Spanish destinations are water scarcity, seasonality and overtourism including associated pollution problems. With DNs offering the potential to better balance such loads and with their entrepreneurial intentions also contribute to job creation, DNs are addressed in the discussion and policy formulation on national level and local level already. [15, 16, 17] In this context, Spain is being followed by Portugal and Thailand, which face different key challenges, as highlighted in figure 3 below.
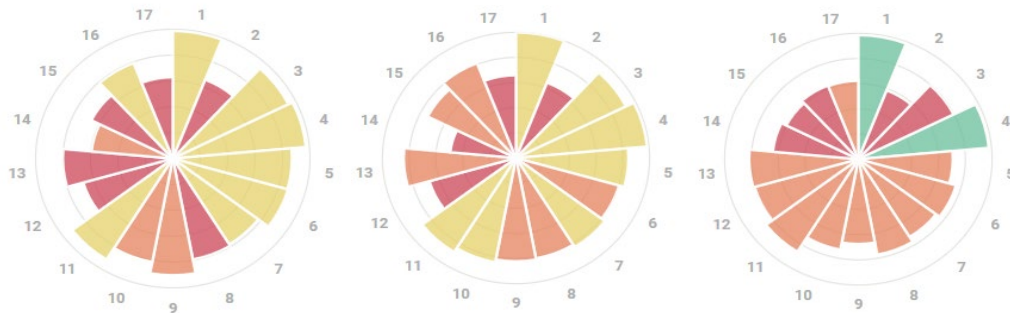
Figure 3. SDG radar of Spain, Portugal and Thailand (left to right). Source: www.countryrisk.io, access 10.04.24

It is important to note that similar indications on the radar maps can represent quite different challenges. Problems with SDG2, Zero Hunger, for instance, in Spain and Portugal are more related to obesity, with obesity in Thailand however already starting to catch up.

4 CONCLUSION

Addressing the first research question, the growing presence of DNs (DNs) has both positive and negative sustainability implications. Economically, DNs diversify local economies by increasing demand for housing, food, and services, reducing reliance on traditional industries. They are often better received than traditional tourists, especially in communities suffering from mass or even overtourism. In small communities a strong influx of DNs can lead to increased resource use and environmental impact, particularly in popular destinations where infrastructure may become strained. Socially, DNs enhance cultural exchange and social diversity, fostering greater social cohesion and understanding. On the downside, their frequent travel can contribute to higher carbon footprints, despite reduced commuting emissions. To balance these effects, sustainable management practices and eco-friendly initiatives are crucial in integrating DNs into local economies. DNs are gaining more attention in policy and action plans and are often seen as a more sustainable form of tourism.

Addressing the second research question, DNs are generally seen as a positive addition when it comes to economic contribution. In terms of SDG impact, it depends on the local challenges. In Spain, DNs can significantly boost the economy through spending on local services and housing, promoting the development of co-working spaces and digital infrastructure. In addition, they help flatten the seasonal tourism peaks. This supports SDG 8 (Decent Work and Economic Growth) and SDG 11 (Sustainable Cities and Communities) by fostering economic activity and encouraging sustainable urban development, and also supports SDG 6 (Clean Water and Sanitation). For Portugal, DNs' spending is expected to stimulate local economies, especially in tourism-dependent regions, supporting SDG 8 (Decent Work and Economic Growth) and SDG 12 (Responsible Consumption and Production) by promoting sustainable tourism and economic practices. In Thailand, the appeal to DNs due to its climate and cost of living can drive economic growth in urban and rural areas alike, while supporting SDG 8 (Decent Work and Economic Growth) and SDG 4

(Quality Education) through improved digital infrastructure and knowledge exchange.

DNs, currently estimated at 35+ million, represent an attractive and rapidly growing market segment. DNs are increasingly being integrated into the strategy and action plans of countries like Spain, Portugal, and Thailand. These nations recognize the economic and cultural benefits brought by digital nomads and are actively developing initiatives to attract and support this growing demographic, enhancing their tourism strategies and local economies.

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