DIGITALISATION AND SUSTAINABILITY: IMPORTANT FACTORS TO BE TAKEN INTO ACCOUNT FOR FUTURE TOURISM MODELS

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Abstract

The coronavirus (COVID-19) pandemic has hit economies worldwide, but maybe one of the most affected sectors is tourism, given the immediate and immense shock suffered by it.

Tourism represents a significant part of many economies, some of them highly dependent on the revenues coming from it in order to improve citizen's life and conditions.

Tourism, a sector built on people-to-people interaction, is one of the major vehicles for promoting culture and advancing intercultural dialogue and understanding.

Besides the importance of this sector and the motivation of people in choosing tourism, the paper highlights possible consequences of the pandemic on this sector and insights of how tourism might look like in the future, as modern advanced technologies have come into our attention.

Maybe this crisis is also an opportunity to rethink and transform the relation of tourism with nature, climate and economies.

So sustainability and digitalisation could be in the center of tourism's recovery and in designing new tourism business models.

I also wanted to add a "human" touch to the paper, so I ask for opinions from my co-workers regarding the impact of COVID-19 on their travel plans and how do they see the tourism sector in the future.

Keywords: tourism, digitalisation, technologies, sustainability, human presence

JEL classification: Z32, Q56

1. Introduction and the importance of tourism sector

The coronavirus (COVID-19) pandemic is, first and foremost, a humanitarian crisis affecting people's lives, and has triggered a global economic crisis. Countries around the world are facing this tremendous challenge, economies are declining and people have to obey strictly rules imposed by their governments and state heads. The future seems so unclear and the end point of all this is truly uncertain.

The crisis reveals and amplifies our vulnerabilities and inequalities, questioning our development models in each and every country. It leads us to rethink and factor in environmental and social issues in our production and consumption modes in order to build just and resilient societies.

Tourism is one of the sectors most affected by the COVID-19 pandemic, impacting economies, livelihoods, public services and opportunities on all continents.

Tourism provides livelihoods for millions of people and allows billions more to appreciate their own and different cultures, as well as the natural world. For some countries, it can represent over 20% of their GDP and, overall, it is the third largest export sector of the global economy. The global wealth of traditions, culture, history and diversity are among the principal motivations for travel.

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2. Impacts and consequences for tourism sector

But tourism is a sector built on people-to-people interaction and one of the major vehicles for promoting culture and advancing intercultural dialogue and understanding. The pandemic has reduce human interaction and this had an effect on travelling, visiting,

spending and using tourism services.

As borders closed, hotels shut and air travel dropped dramatically, international tourist arrivals decreased by 56% and \$320 billion in exports from tourism were lost in the first five months of 2020 [13] – more than three times the loss during the Global Economic Crisis of 2009. Governments are struggling to make up for the lost revenues that are needed to fund public services, including social and environmental protection, and meet debt repayment schedules.

Scenarios for the sector indicate that international tourist numbers could decline by 58% to 78% in 2020, which would translate into a drop in visitor spending from \$1.5 trillion in 2019 to between \$310 and \$570 billion in 2020. This places over 100 million direct tourism jobs at risk [13].

But the consequences are more drastically if we refer to sustainability and environmental levels.

The pandemic risks slowing down progress towards the Sustainable Development Goals (SDGs)¹.

The impacts of COVID-19 on tourism threaten to increase poverty (SDG 1) and inequality (SDG 10) and reverse nature and cultural conservation efforts.

As tourism has so many linkages to other area of society, all this translates into more effects regarding the contribution of the sector to other SDGs, such as gender equality (SDG 5) or the reduction of inequalities among and inside countries (SDG 10).

3. Future of the tourism sector in a digitized world

But this crisis is also an unprecedented opportunity to transform the relationship of tourism with nature, climate and the economy. It is time to rethink how the sector impacts our natural resources and ecosystems, building on existing work on sustainable tourism.

It is time to embrace local values, to promote innovation and digitalisation, creating decent jobs for all, especially for youth, women and the most vulnerable groups in our societies. [14].

But for all these to be successful, the sector needs to advance efforts to build a new model that promotes partnerships, places host people at the centre of development.

A broader vision of the environment that affects tourist destinations shows the existence of other factors that also force traditional tourist destinations to radically innovate their tourism model. Among these factors, technological advances and the urgent need to bet on sustainability stand out.

New strategic lines that vacation tourist destinations could choose to radically innovate their tourism model are needed.

And for this, two basic competitive methods have been chosen around which to design new tourism business models: sustainability and digitization.

These competitive methods are currently the priorities of many governments and also of the European Union² as essential means to improve the competitiveness of the economy, in general, and of the tourism sector, in particular.

¹ http://tourism4sdgs.org.

² At the same time, the Commission's approach in all areas is subsumed by the major objective of creating the Europe's digital decade.

The need to reduce physical contacts to avoid possible contagion by the Covid-19 forces to accelerate the digitization of tourist destinations.

Digitalisation is changing the way people live, work, and travel, and has opened up new opportunities for tourism businesses to compete in global markets.

It is the process through which technology and data-driven management is transforming our social and economic systems and lives. The push to adopt digital technologies is driven by the convergence of advanced technologies and the increasing social and economic connectivity unfolding under globalisation. Digitalisation has the potential to boost innovation, to generate economic and environmental efficiencies and increase productivity, including in the highly globalised tourism sector [5].

The impact that the digital transformation has, and will continue to have on tourism, cannot be ignored. The digital economy is transforming the process of communicating with tourists and marketing tourism services, and opening up new and highly creative ways of delivering tourism services and enhancing the visitor experience. It is changing the way work is organized and services delivered, and also presents opportunities to take advantage of digital advancements to handle transactions, capture and process information and data on tourism supply and demand, and improve and connect operations along tourism value chains and ecosystems.

But not all sectors in the economy are touched by the digital transformation with the same speed and/or extent.

Unlocking the potential of digital technologies and digitalisation in tourism therefore requires a nuanced approach that responds to the unique challenges experienced in different parts of the tourism sector, and in different types of tourism businesses. Addressing the challenges that tourism businesses face in their digitalisation journey can vary significantly depending on:

- Type, size and characteristics of the tourism business, and the subsector they belong to (e.g. transport, accommodation, personal services) [1]
- Access to technologies, information, expertise, advice, mentoring and other resources and support [4]
- Management and strategy-making capabilities, which shape the extent to which business owners sense opportunity, perceive risk and are motivated to seize opportunities [10]
- Location of the business, the social and economic context, and the access and availability of digital technologies [3]

In these times, governments have an important role to play in creating the right framework conditions for the digital transformation of tourism business models and the wider tourism ecosystem. Integrated and coherent policy approaches are needed to leverage the opportunities of digitalisation while also addressing challenges and minimising any negative consequences that may emerge.

4. Human thoughts and their future perspectives on tourism sector

I also wanted to add a "human" touch to the paper, so I ask for opinions from my coworkers regarding the impact of COVID-19 on their travel plans and how do they see the tourism sector in the future.

The sample itself was not big, but I could gather some interesting ideas that are shared below. The flavor and ideas are not always very optimistic, but it is worthwhile to have the whole picture.

There is a general consensus that people and their travel plans were affected like never before and this feeling was felt deeper on the persons that also have kids.

But what is fascinating is their views on the future of the sector itself, depending on individual perception and their expectations on how tourism contributes to their lives.

It is acknowledge the important of modern technologies and people do seem to be attached more and more to them, as the pandemic "made" us all to be more online or to become more virtual, cutting human contact, face to face meetings, social events and so forth.

People will start travelling again after they will be feeling safe again and all this psychological effect would have been gone. But they will still be reluctant to make long term travel plans.

But the perception of the future goes hand in hand with people's motivation in choosing tourism and travelling. Some people do it only to show off or for fun, other sees it as an adventure of the visual and olfactory senses, feeling the freedom of movement, visiting new places full of history that is known only from books, eager to see and meet locals, to know their habits, to interact and understand them. Put it in such lovely words by one of my colleagues, how can all these be replaced by technologies and still have the same impact and feeling for humans? Seems impossible.

Digitalisation and advanced technologies are good as long as they are understood and properly used.

Virtuality and technologies can do almost everything; can recreate images, feelings, emotions and much more. What you can see through VR glasses can feel so real, but it doesn't mean it actually is.

On the other hand, people felt that certain forms of tourism will no longer exist and we will never return to the same tourism as it was before COVID-19.

And the differences will be even more pronounced as the health crisis lasts longer, and the economic crisis that will follow, deeper. States will not be able to cover the losses of the sector, the offer will decrease through chain bankruptcies (hotels, travel agencies, airlines). Demand itself will exist after the pandemic ends, but the crisis will reduce much of the income available for such activities (compared to the pre-pandemic level).

Digitalisation or advanced technologies will appear in all sectors, but they are not essential in the hospitality sector, so maybe these are not the solution here, because there is a saying: man sanctifies the place.

People would rather choose, in the near future, locally vacations and places easy to be accessed (via car for example). Mass tourism would probably disappear (but this can be translated in less pressure on the ecosystems) and the business tourism part probably will be greatly reduced. Many bankruptcies envisage, the state will probably nationalize a lot of the sector's assets, whoever has money will preserve them and will reopen them after the economic crisis passes, if it will be the case.

I, myself tried to replace travelling abroad this year with domestic tourism. It was nice, but not complete. I miss airports, foreign languages, unknown routes, the joy in discovering different places and traditions. I am a person that enjoys real life and definitely virtual is not for me.

More focus on consumer needs and benefits, as tourism is a service business in the end.

Consumers still have needs even after the pandemic period ends, but those needs have changed and it is time to redesign the products and services accordingly.

So for the next year(s), domestic tourism could be helping in recovering the tourism sector on one hand. Digitalisation in communication, tele-anything (education, working, medicine) done by distance using VR, AR, modern tehnologies, electromobility as sustainability will be more and more in the center of people's concerns that seem to become more aware of protecting the environment and last, but not the least **WE** as persons need to refocus our priorities and our way of living – these could be called priorities in the future.

5. Conclusions and possible recommendations

The development and adoption of new technologies is expected to continue at pace in the future, driven by the cumulative nature and exponential rate of technological change, the convergence of technologies into new combinations, dramatic reductions in costs, the emergence of new digital business models and declining entry costs [12].

Realising the benefits from the digital revolution will depend on a combination of investment in digital infrastructure, as well as the skills development of human capital and innovation in business models and processes [7].

On digitalisation, we will leverage on the power and the acceleration of the digital transformation to foster the SDGs' implementation as well as the climate, biodiversity and social goals. We will work towards a more systematic integration of the opportunities and challenges of the digital transformation and its societal impacts, including by recognizing the widening of the digital divide and inequalities and focusing efforts against it.

Many current policies are the legacy of the pre-digital era, and difficulties in understanding the changes underway and their implications may delay the review and adaptation of these policies. Such an understanding is imperative as digital transformation affects the entire economy and society.

Follow up on my colleagues, there is a great deal of understanding the importance of modern technologies and digitalisation monopolizing our lives. Some of them would prefer to have everything at just one click away, others prefer real feelings and human interaction.

Clients' needs and benefits should be in the center of future business models and everybody needs to be prepared to change from individual level up to the sector level.

But as a whole feeling, REAL or REALITY is more valuable than VIRTUAL or VIRTUALITY and human presence is important for carrying on with the tourism sector. In this sense, I would like to recall an old saying: "MAN sanctifies the place".

The human desire to explore will never die.

Bibliography:

- 1. Calvino, F., Criscuolo, C., Marcolin, L., Squicciarini, M. (2018), A taxonomy of digital intensive sectors, *OECD Science, Technology and Industry Working Papers*, No. 2018/14, OECD Publishing, Paris, https://doi.org/10.1787/f404736a-en.
- 2. COM(2020) 690 final COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Commission Work Programme 2021 "A Union of vitality in a world of fragility", available at https://ec.europa.eu/info/publications/2021-commission-work-programme-key-documents en
- 3. Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, E.S. (2018), Digitalisation in Tourism: In-depth analysis of challenges and opportunities. Low Value procedure GRO-SME-17-C-091-A for Executive Agency for Small and Medium-sized Enterprises (EASME) Virtual Tourism Observatory. Aalborg University,
 - Copenhagen. https://ec.europa.eu/docsroom/documents/33163/attachments/1/translations/en/renditions/native
- 4. European Commission (2017). Management and Content Provision for ICT and Tourism Business Support Portal. Final Report. March 2017. Paris.
- 5. OECD (2017), The Next Production Revolution: Implications for Governments and Business. https://dx.doi.org/10.1787/9789264271036-en.
- 6. OECD (2019), Enabling SMEs to benefit from digitalisation: Scoping Paper. Centre for Entrepreneurship, SMEs, Regions and Cities (CFE) CFE/SME(2019)2.

- 7. OECD (2019), OECD SME and Entrepreneurship Outlook 2019, OECD Publishing, Paris, https://doi.org/10.1787/34907e9c-en.
- 8. OECD (2020), Tourism policy responses to coronavirus (COVID-19)
- 9. OECD (2020), *OECD* Tourism Trends and Policies 2020, OECD Publishing, Paris, https://doi.org/10.1787/6b47b985-en.
- 10. Rachinger; M., Router, R., Müller, C., Vorraber, W & Schirgi, E. (2018). Digitalisation and its influence on business model innovation. Journal of Manufacturing Technology Management Vol. 30 No. 8, 2019.
- 11. UN (2020), Policy Brief: COVID-19 and Transforming Tourism
- 12. UNCTAD (2018), Technology and Innovation Report: Harnessing Frontier Technologies for Sustainable Development. New York. https://unctad.org/en/PublicationsLibrary/tir2018overview en.pdf.
- 13. World Tourism Organization (UNWTO), World Tourism Barometer, vol. 18, No. 4, June 2020, Madrid, available at https://doi.org/10.18111/wtobarometereng.
- 14. UNWTO, "An Inclusive Response for Vulnerable Groups", 2020, available at https://www.unwto.org/covid-19-inclusive-response-vulnerable-groups.