How could the Region sustain tourism employment in ongoing digitalisation of the industry?
Key messages

1. Tourism employment is affected by digitalisation, with changes in skills requirements, a restructuring of work and a reduced employment to tourist ratio.

2. Automation is expected to increase by 2030 given recruitment difficulties, competition on prices and margin pressure.

3. As the effects of digitalisation is multilevel, adopting a systemic approach appears to be most relevant both in research and in policy making.

4. The main recommendation to BCR’s government is to support the tourism industry by adopting and implementing a policy in which digitalisation is used to contribute to the region’s general sustainable development goals, thanks to purposefully designed strategic tools and an enhanced management of the stakeholder network.

5. Action should account for the fact that technology adoption patterns vary depending on the sub-sector of the industry, the size of the organisation and their managers’ perception of technologies.
Introduction/summary of the problem

Just like other tourist destinations in the world, BCR is undergoing growing digitalisation. Digitalisation takes a variety of forms. New services are provided to guests (e.g. immersive experiences), and work tasks are being automatized in tourism organisations.

Digitalisation has also introduced considerable changes within tourism value chains, which affects the performance of tourism organisations (e.g., control of the chain by tech companies), introduces new business models and alters tourist consumption behaviours (e.g. the expansion of C2C services like Airbnb). Each of these trends already affects employment, and this is likely to become considerably more pronounced in the future.

Work is affected in different ways. New skills are or will be expected from workers. Work tasks are and will be reorganised with automation (e.g. mobile check-in, chatbots) and the search for productivity gains. Other factors will impact work: characteristics of tourism development in the destination area (e.g. growth rates, types of organisations and of services...), the potential relocation of work and changes in labour contracting practices given the expansion of digital labour platforms, etc.

The aim of Cap-SMART is to inform policy makers on ways to sustain tourism work in BCR by providing empirical data on stakeholders’ perceptions on how these trends are expected to evolve by the 2030s.
Methods, approaches and results/body

Cap-SMART adopted a qualitative, constructivist and multidisciplinary approach that included work psychology, ergonomic and tourism studies. Data was collected at different levels of analysis—i.e., the individual, the organisation, the destination, and the tourism global system—and for 3 tourism sub-sectors, including hospitality, museums & attractions and congresses. Research work was split into 2 phases.

Phase 1 (Oct. 2018-2020) focused on the current state of digitalisation in Brussels tourism organisations. Phase 2 (2020-2023) aimed to gain a prospective insight into how the system was likely to evolve and the implications thereof for destination management. Data were collected using the following methods:

1. Two surveys with managers of tourism organisations, ante- (n=48) and post-COVID crisis (n=24);

2. Six series of semi-structured interviews with a total of 144 tourism stakeholders;

3. Observing workers dealing with newly introduced technologies;

4. Desk research on the influence of tech companies and on tourism education programmes;

5. Two knowledge co-construction workshops based on strategic prospective scenarios.

Among Cap-SMART’s key results the following ones can be highlighted.

– Technology adoption patterns varied depending on the sub-sector, organisation size, managers’ perception of technologies as well as the target markets. A lack of reliable information on technologies was pointed out.

– Automation remained limited in BCR but is very likely to increase as a consequence of recruitment difficulties; a problem anticipated in other European destinations before Covid-19 (NTG, 2019).

– Participants expect digitalisation to have an effect on skills requirements in a near future.

– Participants regard growth as a solution to a decreasing employment to tourist ratio.
Conclusions

With its systemic approach Cap-SMART developed knowledge on how digitalisation affects the tourist destination system from the perspective of different stakeholders, i.e., workers, managers, education providers and destination management stakeholders.

Although its results should be corroborated by additional studies, the project still provides insights into how the tourism system is evolving in BCR and is likely to evolve by the 2030s. Tourism stakeholders are aware of digitalisation-led challenges and express needs for reliable information on emerging technologies and for regular updates on adoption patterns and the skills that will be required to adapt.

Practitioners also stressed that digitalisation should not be the core focus of destination management strategies, but a means towards an end. This end remains to be defined, though. Growth was mentioned just like sustainability. Contradictions between sustainability goals and digitalisation were pointed out.
Policy recommendations

Based on Cap-SMART’s key results, the following policy recommendations can be made.

1. **To adopt and implement with tourism stakeholders a policy on impactful and sustainability-led digitalisation.**

Research participants highlighted their concerns over current policies which tend to promote digitalisation as an end on its own. The goals that are aimed at with digitalisation policies are not clearly determined. If a sustainable approach is to be adopted, policies and support measures must explicitly establish links between the digital technologies that are promoted, BCR’s societal goals and the needs of tourism stakeholders. This would provide guidelines for the tourism industry in the longer term, and guide tourism practitioners’ decisions relating to technological adoption.

The Region’s strategic vision should be clearer and endorsed by key stakeholders. Visit.brussels and hospitality.brussels, as public actors of the destination management network, have a leading role to play in rallying the key stakeholders to the definition and implementation of the vision (cf. recom. nr4). Without such endorsement the risks for the region regarding digitalisation is that tourism organisations will follow a logic essentially driven by economic performance and/or might make unsound investments.

From a sustainable perspective, the strategic vision should harness tourism to BCR’s societal challenges, as those pinpointed in CIRB’s strategic plan in 2019: protecting and enhancing biophysical environment and landscapes, increasing employment rates; fighting spatial polarisation... The vision should then be translated into a strategic plan that provides a roadmap for tourism stakeholders. This involves setting objectives that can be assessed, with a development path and objectives for each sub-sector. Because sub-sectors are closely interrelated, it is also crucial that the plan adopts a systemic approach and defines transversal objectives and indicators.

2. **To set up a technology watch and tourism strategic tools for the BCR destination**

Tourism destinations face fierce competition, and competition has increased with digitalisation. Setting up a technology watch and a tourism observatory are ways of supporting decision-making relating to the marketing and management of tourism organisations. Of course, both strategic tools need to be regarded as means of achieving BCR’s tourism strategic objectives (cf. recom. nr1). If adequately designed they also can support SMEs, and help fight against the digital divide between organisations. Many tourism SMEs encounter difficulties to access trustworthy and well-suited advice. Yet, supporting SMEs could be considered a way to address the digitalisation-related risk of increased concentration in the industry. It can be assumed that such concentration would lead in the medium term to an increased standardisation of tourism services in BCR...
Policy recommendations

and across the world. Of course, strategic tools have a cost, and it can be advised that tourism stakeholders be invited to think of ways to finance it. Some partnerships with other destinations could be a way to reduce costs.

The technology watch should advise tourism stakeholders—including tourism education providers—on available and emerging technologies on the market as well as on the potential disruptive effects of new business models. Most importantly the watch should provide information that is unbiased and reliable, away from the distorted discourse of tech suppliers and lobbies. The analytical reports should address the following issues: In which technologies should tourism organisations invest in priority depending on the sub-sector and the size of the organisation? What return can be expected from those technologies? What needs to be considered when investing? What to expect when installing a technology and piloting it with staff? How to measure the risks of not investing? Additionally, the watch could gather data on the needs of Brussels tourism organisations that are currently not satisfied. This could be a valuable tool for technology engineers who often lack insights from tourism organisations.

The tourism observatory should provide analytical reports pertaining to:

A. The development of tourism in BCR and its economic, social and environmental impacts;

B. On patterns in tourist consumption behaviours and customer journey;

C. On product-market fit for market segments selected based on their interest for the region, etc. Moreover, it is important that strategic questions on which advice is needed (cf. recom. nr1) guide the missions of the observatory. Whereas BCR already has a tourism observatory, the data and reports that it provides remains limited in terms of strategic analysis, even though there was some improvement over the last years.

3. To set up a tool that monitors and orients transformations of tourism jobs

Extant knowledge does not enable us to anticipate how work will be reorganised in tourism organisations. Tourism managers do not have a clear view on the matter. BCR needs additional knowledge that helps the Region and employment stakeholders—i.e. tourism education providers, employment agencies, trade unions, and (future) workers—manage the potential transformation(s) of the work structure in tourism organisations. To do so, we suggest that BCR set up a tool that monitors transformations and, if relevant, orient it.
For instance, a task force could be asked to collect and analyse data on a 3 year-basis. The analysis should primarily provide insights into:

**A.** The occupations concerned by the restructuring of tasks in the organisations;

**B.** The effects of these reconfigurations on the well-being of workers (work accidents, absenteeism, turnover, etc.);

**C.** The skills required in the newly created or greatly transformed occupations;

**D.** The status of the workers, working conditions, and

**E.** The career prospects and potential relocation of activities for the least qualified or most threatened profiles.

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**4. To strengthen the destination management network by reinforcing its coordination**

Digitalisation raises questions about how effective and efficient the management of a tourist destination is. Research participants pointed to the ineffectiveness of current coordination of the destination management network. The Region should work on this particular issue by supporting both agencies involved in destination management. These agencies should combine forces towards strengthening their leadership within—and their coordination of—the network. This should shed light on coordination needs that are presently not fulfilled. Additionally, the Region should organise workshops in which primary tourism stakeholders, including education providers, would be asked to determine who is part of the destination management network, what roles each partner takes within the network, and the types of resources or actions they are ready to share, etc. The members also need to determine collective goals and the network structure they want to develop.
List of publications

Cloquet, I.; van de Leemput, C.; Hellemans, C.; Bauthier, I.; Juziak, V.; Flandrin, P.; Patris, O. & Toumia, R. (s.d.). Anticipating how digitalisation will affect tourism employment in the Brussels-Capital Region, Brussels Studies (submitted for review).


Toumia, R. & Cloquet, I. (xxxx). Digitalisation et gestion des destinations touristiques : confrontation entre théories et réalités de terrain (submitted to Téoros – awaiting reviews)
The author & project

Cap-SMART is a multidisciplinary project that was conducted at ULB, on one hand, by Catherine Hellemans, Cécile van de Leemput and Pierre Flandrin from research Center on Work and Consumer Psychology, and on the other hand by Roxane Toumia and Olivier Patris under the supervision of Isabelle Cloquet from BCTS (tourism studies). Contributions were also made by Nicolas Casula, Vincent Juziak, Isabelle Bauthier, and Julien Menu.

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DISCLAIMER

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Through the Prospective Research programme, the Brussels-Capital Region is hoping to fund research projects from a dual perspective: to provide a solid regional prospective vision; to build solutions to the specific challenges it will face in the years to come. The solutions proposed by the funded projects must take into account Brussels’ urban complexity as well as the Region’s environmental, social and economic transition objectives. The programme targets researchers in human science as much as researchers in exact or applied science.