Toward a futureproof equilibrium in the City of Amsterdam: Measuring city hospitality experience of visitors and residents

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Ralf Burbach and Menno de Vos: Transformative Hospitality Education through Tech Abilities: a blueprint for creating immersive (learning) experiences

The hospitality and tourism industry is a driver of employment and mobility across the EU. The Covid pandemic has caused an acute crisis in these sectors, a crisis that makes the need for innovation manifest. The consortium has sought, already before the crisis, to contribute to the innovative needs of hospitality and tourism by strengthening the inquisitive skills of their students, thus allowing them to anticipate future disruptions in their profession. They have addressed this need by adopting Design Oriented Research methods. The overall aim of THETA is therefore to prepare students and professionals for a changing profession through immersive real-life learning experiences. In addition to in-company research and learning (options that are currently scarcely available), the project seeks to offer these experiences in versatile, virtual contexts for real-life learning, using AR/VR enabled learning spaces. These spaces, accessible through multiple platforms, in particular mobile phones, will be used to share content and learning experiences at four of the European top-notch universities.

2

Jeroen Oskam and Anna de Visser-Amundson: Preparing "field problem solvers": the design of a research informed hospitality management curriculum at Hotelschool The Hague

In the past four years, faced with rapid and volatile developments in the hospitality profession, Hotelschool The Hague chose to introduce Design Based Research as a way to address the need to prepare hospitality graduates as 'field problem solvers', and thus to bridge the gap between practice and academia. The school curricula have been reformed around the principles of Design Based Research. The results of the curriculum reforms are being assessed in multiple ways. Traditional educational metrics, such as study success and satisfaction, contribute to our understanding of how the changes are perceived by students and faculty. More important than the immediate educational experience is perhaps whether the reformed curricula succeed in bridging the research-practice gap. The paper will outline and discuss the first indicators of achieved outcomes, such as the professional relevance of student research, cognitive effects of the new curriculum and career entry of hospitality graduates.

3

Hanneke Assen, Erwin Losekoot, Latifa Benhadda and Migchiel van Diggelen: The Impact of Design-Based Hospitality Education

This paper describes the rationale for implementing design-based education at the hotel management school, NHL Stenden University of Applied Sciences. It reviews the literature on hospitality education and the role that design thinking can play in ensuring that such education remains relevant to industry as well as academically rigorous. It considers the importance of transferable and lifelong learning skills and how these can be stimulated through an innovative curriculum and design thinking principles. The concept of the 5-step Educational Ladder is used to evaluate the final portfolio assessments of 8 groups of students (24 in total). Results show that while students presented professional end-products, students still struggled with the interactive nature of design thinking and writing reflective reports. Some differences were noted between different age groups and students who had had prior educational or industry experiences.

4

Dineke Koerts: A Great Leap Forward: the Professional Doctorate in Tourism, Leisure & Hospitality

The domain of leisure, tourism and hospitality is increasingly important for the Netherlands. In 2019, the year before the Covid-19 pandemic started, business activities in the domain generated revenues of EUR 91,2 billion, and employed around 813.000 people (CBS, 2019). Tourism growth (pre-Covid) pushes investments in infrastructure (transport and mobility, accommodation, amenities, events, and travel services). The resource use, complexity and extended scope of the domain is visible in a large variety of development strategies, investment vehicles and business models.

Because of its increased impact on society, the Raad voor de Leefomgeving en Infrastructuur (2019) mentions the need for a paradigm shift within leisure, tourism and hospitality. The new coalition agreement recognizes that tourism should receive full attention in public policy. The effects of the Covid -19 pandemic have demonstrated the need for flexibility and resilience to shocks and crises. In the near future, businesses, industry associations and other actors in leisure, tourism and hospitality will continue to face serious challenges, as it needs to adapt to increased impacts of climate change (NRIT, 2021). As a result,

there is an urgent need for developing, testing and evaluation of new models, systems and processes of interaction in leisure, tourism and hospitality.

Seven Universities of Applied Sciences (UAS) have decided to join forces in response to these challenges, and develop a tailored Professional Doctorate (PD) degree program in leisure, tourism hospitality (PD-LTH) . The current PD program proposal is a follow up to the proposition approved by the Vereniging Hogescholen (VH) in 2020 (CELTH, 2019).

The PD programme will offer a new career perspective for researchers and practitioners and allow the domain to professionalize and respond to society challenges. By using practice-oriented research, based on interventions and short-cyclical research output, PD candidates are enabled to develop applied solutions. Because of this, the seven UAS see the PD as a natural addition to their educational portfolio.

5

Jeannette Van Geuns and Angelique Lombarts: Business Ethics in Hospitality Education What ethical dilemmas and topics should be taught at hospitality business schools?

The purpose of this paper is to start a discussion about the dilemmas and topics hotelschools students should have been confronted with before they start their professional career. Differently put, what should students be taught at hospitality business schools about (business) ethics? The hospitality industry is one of the fastest growing industries worldwide. Although Covid caused a real set-back in the growth-spurt, this explosive industry expansion seemed to come only to a temporary stop. Hence, the predicted recovery of the hospitality industry means the industry needs a lot of people to cater for its needs such as employees. Students from hotel schools meet these needs when they go to work in the hospitality industry. Therefore, they should to be aware of the (potential) impacts of hospitality businesses on wider society.

Having a moral compass and knowing how to distinguish ethical dilemmas in an international or global world, will be one of the required 'soft' skills, in the near future. Almost everyone has such a compass and will apply it, unconsciously or consciously. With the blurring of boundaries, or more practically, with students doing their internships all over the world, and alumni finding employment as well globally, it is necessary to know what is right and wrong from a Human Rights and Social Justice perspective and universal agreements. Where 'law' stops, ethics starts is a commonly known principle. But law and justice are not globally interchangeably. For instance, child labour, strictly forbidden in Western

European or Global North countries, is a mere survival mode in many Global South countries. Another illustration concerns women rights: in many countries not respected at all resulting in amongst others women abuse and gender inequality. Animal (ab)use is looked upon differently around the world: German and Dutch tour operators do not offer elephant or Camel rides in their programs anymore to avoid animal assault, many countries and tourists do not care. So, what is 'normal', what 'acceptable', when does one have the possibility to oppose or react, in short, what can students encounter and what do (Dutch) hotelschools want them to be able to accept, respect and/or refuse? And more important how can these schools guide and support them?

The students of the (Dutch) hotel schools follow part of their studies abroad by doing internships. This takes place in a diverse range of companies and countries. In addition to the cultural awareness they are taught during their studies, developing an ethical compass is a mandatory aspect, as is stated in the professional and education profile of the Dutch Hotelschools (Windhorst et al., 2017) To find out what students need and want to know, what gaps they experience in their education, several students studied these gaps. Their starting point was Myung's' literature review (2018) to find the most pressing dilemmas. Myung reviewed recent developments in hospitality articles in the major hospitality and tourism journals between 2006 and 2015. The students and their supervisors continued to study the subsequently period form 2016 till 2020. Next, the students each selected a specific area to discover the additional and actual problems in that area. Interviews with stakeholders such as industry partners, faculty members and Ethics professors, students, and alumni resulted in a variety of topics.

Ethical dilemmas are receiving more attention than before as evidenced by the literature review undertaken partly motivated by a focus on the Sustainable Development Goals (SDGs). The findings are related to the actions or the absence of actions people undertake, i.e. their behaviour whereas the attitude related topics refer to their ideas and thoughts, the way people think about certain topics. The moral compass of organizations mostly propagated by top management strongly influences the organizations' attitudinal aspects as shown in academic literature and may be seen as a driver of human's behaviour. Obviously, most findings are related to the attitude and/or to the behaviour of people. One of the areas covered is Human Resources Management and leadership The theoretical impact of this research is manifold. It highlights the still underexposed topic of ethics in the hospitality industry, even though it is one of the fastest growing industries. In addition, it indicates per field where the possible ethical dilemmas may arise and where students or professionals may be confronted with them. It also becomes clear that employees have responsibilities on an individual level as well as on an organizational level. However, if the organization's moral compass is malfunctioning, poorly developed or not developed, individuals may feel compelled to go along with it, consciously or unconsciously, with all the consequences this may entail. Hence, hence the importance of a well-developed moral compass for future hospitality leaders.

The originality and validity of this research is demonstrated in the participation of students as future professionals. By involving them in the research, they expose themselves what areas are interesting or necessary to be included in their curriculum. moreover, they have discovered for themselves where possible ethical dilemmas occur and are better prepared for them in their professional future, which is the main practical implication as well. A limitation of this study, however, is that not all topics have yet been covered. New dilemmas will arise every time, for example with the increasing influence of social media, intellectual intelligence, the widening gap between rich and poor, the possibilities of space travelling etc. At the same time, these are also new topics for follow-up research together with and by students and faculty members.

6

Birgit Bosio & Fabian Erhart: Measuring tourism success. A holistic approach of evaluating tourism impacts in the region of Tyrol/Austria

Tourism has become a major industry for many national economies. So far the main argument for this touristic development has been the economic impact of tourism. Even though the negative aspects of tourism are evident, the implementation of relevant indicators addressing also the environmental and social dimension of the industry is still missing in many countries. This is due to lack of policies, but also missing data. Therefore, many countries still rely on economic performance only. This paper gives an overview of various approaches to implementing a more holistic approach by using sustainable tourism indicators as well as addressing challenges on various levels in general. It uses the example of the tourism-intensive region of Tyrol, Austria to present how a more sustainable tourism development might be achieved. It presents the Tyrolean Path as a strategy paper and current studies for changing the way how we measure success and thus destination competitiveness. The authors show how a bottom-up approach aims at integrating various stakeholder groups in order to not only implement sustainability policies, but trying to change people’s minds on how tourism could work in the near future.

7

Karoline Wiegerink, Julie Ferguson and Boukje De Boer: Toward a futureproof equilibrium in the City of Amsterdam. Measuring city hospitality experience of all stakeholders

Cities are challenged finding an equilibrium in the intensified use of their urban consumption spaces. Bringing together work, consumption, recreation and habitation in a delimited area within the city is challenging urban policy makers. This paper takes the perspective of the experienced hospitality of different stakeholders within an urban consumption space. City hospitality fits in the multi-stakeholder approach that is needed to co-create places which are attractive to visit, enjoyable to live in and full of opportunities to undertake (UNWTO, 2019). Insights into the hospitality experience of different stakeholders and the related effects and behavioural intentions of stakeholders delivers valuable information for hospitality makers, stakeholders who collaboratively 'make the city' (Koens 2021). It aims to contribute to balanced cities from a stakeholders' experience perspective.

We take the elements of the City Hospitality Experience Model, as a basis and discuss a cascade of measures and indicators about how these are experienced by the main stakeholders within an urban consumption space: residents, visitors and businesses. We combine the outcomes of different empirical studies about how the city offerings, product, atmosphere and behaviour are perceived, from the perspective of visitors, residents and businesses with a special focus to Amsterdam. And reflect on its general value and applicability towards a measure tool for experienced city hospitality in urban consumption spaces.

8

Fani Efthymiadou and Anna Farmaki: Women empowerment in Airbnb context: A host perspective.

The model of sharing economy has been rapidly growing and developing in the contemporary society. In tourism and hospitality research, Airbnb has emerged as a primary provider of short-term rental accommodations on an online marketplace which offers rooms and homes for travellers (Zervas et al., 2017). Found in 2008 and providing accommodation rental services, Airbnb can be found in more than 191 countries and approximately 200 million users have been using it (Airbnb, 2019). By transforming lodging from a business-to-customer model to a peer-to-peer model, Airbnb is viewed as a disruptive innovation in the hospitality industry (So et al., 2018) that may yield significant economic and social benefits to its users. Several studies have investigated various aspects of Airbnb, such as the attributes of guests (Belk, 2014), guest satisfaction (Tussyadiah, 2016), regulatory issues (Nieuwland & Van Melik, 2018), impacts on the hotel industry (Zervas, Proserpio, & Byers, 2017) and the local community (Stergiou & Farmaki, 2019) as well as host practices including discrimination (Farmaki et al, 2020).

Likewise, hosting on Airbnb may provide entrepreneurial opportunities, financial gains, and opportunities for socialization for hosts (Farmaki & Kaniadakis, 2020; Lampinen & Cheshire, 2016). Despite the burgeoning number of studies on Airbnb user perspectives, little is known of the views of women users of the platform and especially hosts (Farmaki, 2019). This is surprising as women represent 56% of Airbnb hosts (Airbnb, 2019). Within hospitality, the need for sustainable development by promoting gender equality and women empowerment is well documented (Dashper, 2020; Segovia-Perez et al., 2019). Many academics have highlighted the contribution of sharing economy to the SDGS (Heinrichs, 2013). Furthermore, the platform proudly proclaims that it contributes to women empowerment as through hosting they can gain several economic and social benefits. Nonetheless, insofar there is no study examining women empowerment of Airbnb female hosts. However, the extent to which Airbnb can promote gender equality and empower women remains an underexplored area. To fill this research gap, we draw from Kabeer's (1999) women empowerment framework which acknowledges empowerment as a dynamic process requiring resources (e.g. financial, social support) and agency (capacity to make decisions) in order to achieve desired outcomes.

9

Neil Walsh, Natasha Lomonosova, Maja Turnsek: Hospitableness and the war in Ukraine: agency and the Welcome Assemblage in the Shared Accommodation sector.

This research explores and discusses hospitable acts performed during the war in Ukraine in the shared accommodation sector, on and via the platform of Airbnb and in contrast to alternatives such as Host4Ukraine (Churchpool). Amongst the first responses to the war in Ukraine Dolničar and Mccabe (2022) call for solidarity tourism: "Tourism-related action taken by governments, tourism businesses and tourists to help people suffering during and after crises, driven by empathy towards people, a sense of unity, and a shared understanding of societal

standards and responsibilities." They list Airbnb offering free accommodation to Ukrainian refugees with the support of their hosts as the first example. The paper engages the concept of 'hospitality life politics' (HLP) as proposed by Lynch (2017) into the context of the outpouring of financial aid for the Ukraine in a time of crisis. Hospitable acts performed by individual persons are demonstrative of the 'welcome assemblage' and 'hospitality as agency' in a wider Hospitality Life Politics. The specific hospitable acts examined in this paper include: Act 1, Airbnb intended to hospitably embrace Ukrainians in the crisis, people from countries in the EU, along with others from the UK and USA began to book (and pay) for accommodation in the Ukraine on the sharing accommodation platform Airbnb. These purchases are made with no intention of visiting the Ukraine, a key purpose of this act is to send money to Ukrainian citizens, that is the Airbnb ''hosts'' (recipients of the booking payment) and therefore provide targeted financial aid as the crisis unfolds. Act 2, Airbnb In response to (and following) act 1 (as above) the brand management of Airbnb dropped the fees for hosts and customers, thus further advancing the financial benefit for senders of the payment and receivers ''on the ground''. This act is framed by or connected to the tenets of the recently established project in which Airbnb also helps house fleeing refugees from the Ukraine Airbnb.org - Host people fleeing Ukraine and a continuation of previous similar efforts with regards to the war in Syria.
Similar response was made by other accommodation platforms, for example Booking.com allowed the hosts to offer refugees from Ukraine a place to stay for free or at a significantly reduced rate with Booking to waive their commission fee for these reservations. Act 3, Platform Creation specifically for the Ukraine. Specific platforms were developed for the purpose, as is the case of Host4Ukraine, developed by Churchpool (app targeting Christian parishes) and described by one of its initiators: "It's like Airbnb, where people can help people." Underscoring the above phenomena is the contested neoliberalism of the sharing economy, at once hospitable and commercial. The paper raises important questions such as: What do these acts 'mean' for developments in the sharing economy itself, and what do these acts 'mean' for discussions of neoliberalism, (unconditional/conditional) hospitality 'in' the shared accommodation sector? How is hospitable agency of host and guest manifest and produced? One of the most common critiques of the "sharing" accommodation before the war in Ukraine was their role in not only increasing the value of the real estates (e.g. Benítez-Aurioles & Tussyadiah 2020) but aggravating the rental market for long-term rent (e.g. Trojanek et al. 2021). As for now the refugee accommodations options are short-term rental solutions.

However, the housing situation of Ukrainian refugees needs to be thought of in the longer perspective, since there are no stable prognosis about the end of the war, and even when it ends, many people cannot go back immediately (their houses are ruined, streets are mined, many roads are mined or destroyed as well as hospitals and kindergartens). There is just not enough social housing for such a large amount of people and some of them also do not qualify for social housing (still have some income from Ukraine or some money in their bank accounts). Those people are already looking for a long-term rent in the receiving countries but face the same problems as locals - shortage of available rental options and in some cases lack of protection of renters' rights. The situation with housing for rent is much worse in larger cities - exactly where Airbnb is more active and exactly where more refugees go. It will therefore be highly important to follow further development and the role of such initiatives from a broader context and from locations with different levels of hosting accommodation regulation. This paper examines the minutiae of these two acts within HLP that are co-constituted by the materiality of the shared accommodation sector (the platform of Airbnb) and levels of involvement that are corporate and individual. A welcome assemblage' and 'agentic capacities' is produced in ways we have not seen before (happen so rapidly) in the shared accommodation sector. The 'welcome assemblage' refers to the collective experiences and feelings of macro and micro issues which constitute, and contribute to, the individual's constructed sense of welcome. Agency for the purchaser (the buyer), agency for Airbnb and the agentic capacities of the Airbnb host (persons in Ukraine), as well as the performative energies of the platform itself are mutually unfolding to provide ontological securities in a time of acute geopolitical uncertainties. Methodologically the paper employs a critical discourse analysis of four sites of study elicited from/within 3 countries, Croatia, Slovenia and the United Kingdom.

- Airbnb reviewer comments (on Airbnb reviews) for refugee hosting.
- Host4Ukraine hosting profiles
- Airbnb and Host4Ukraine press coverage
- Airbnb and Host4Ukraine brand content

In the method analysis the nature of the sites and 'arrangement' of voice within the texts are paramount. In what ways is the agency of the narrator and the narrative arranged or enabled in and through these different sites or 'texts'. Some local questions arise to be taken into the method action: Are the hosts (the recipients of the payments) Ukrainian? Are the hosts resident in the Ukraine now? Are the hosts among the fleeing refugees? Do the guests (those who booked) capture social capital that elevates their own hosting? And similarly, what are the implications for the Airbnb brand reputation. In sum, what do this performative assembly mean for the futures of agency and hospitableness actioned in the contested neo-liberal landscape of the shared accommodation sector.

10

Jan Huizing: How can Hotels contribute to Local Community

Cities and tourism industry increasingly are looking for ways to effectively include residents, engage with local community. Recent developments like negative impacts and perceptions of tourism and more awareness for resident interests and quality of life pose challenges to tourism industry. How can tourism be a positive contributor to the local community, create sustainable value for and with locals. More specific to hotels, how can hotels contribute to the local community and engage with locals. While being a key tourism provider and 'inhabitant' in the local community, the level of community engagement by hotels seems limited, although interesting industry innovations and initiatives can be found, some of which are subject of a case study. More research is needed to add to the literature and to build evidence. Existing literature mostly addresses tourism and communities in general, but can be more specific to the relationship between hotels, its visitors/guests and the locals in the context of the local community. More practice evidence is needed to contribute to the specific knowledge base and to monitor the rather complex and dynamic phenomenon of the hotel and local community relationship.

As a programmatic paper, this paper aims to provide direction for further research. The proposed research aims to further conceptualizing of relationships between hotels and locals, to provide hotels and communities (destinations, neighbourhoods) with evidence-based insights, which support them in determining effective directions and interventions to further engage with locals. And by doing so, foster sustainable communities and tourism.

The suggested research approach is multi-case study, while allowing for mixed-methods.

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Hana Luthfiyah Zahidah, Andreas Romulo, Diana Lo: Characteristics of soy sauce made from unconsumed overripe tempeh

Soy sauce, also known as a fermented food product, made with adding or not adding spices. Soy sauce produced in China is only made by soybean or a mixture of soybeans and wheat. Soy sauce is often used as condiment for food dishes in Asian countries and this fermented product made by Aspergillus sp. for koji fermentation. This product has a strong umami, salty flavor, and caramel-like taste, that acts to improve overall aroma and savory flavor. There are various foods that can be added with soy sauce, such as sashimi, sushi, meat, and fried noodles. There were two stages of fermentation in making soy sauce, first stage is koji fermentation and second stage is moromi fermentation, which is conducted by soaking fermented soybeans in salted water. The sodium that is usually used in making soy sauce ranges from 17-19%. High salt solution concentration with a value of 20-25% has an important role to inhibit microbes growth selectively.

Meanwhile, salt solution concentration under 16% may lead to spoilage and fermented lactic acid bacteria are unable to grow. In making soy sauce, high protein content is needed to overcome the availability of alternative raw material issues and support the diversification program of nutritious food sources. Hence, nuts can be used as an alternative raw material due to high protein content and procurement for nuts is relatively easy and has relatively low price compared to animal protein source. Indonesia is known as a country with high soybean production and highest tempeh producer in the world. Tempeh is a traditional Indonesian food product that is made through the fermentation process with the help of Rhizopus sp. Tempeh has a high protein content ranging from 14.77 to 22.73%. High nutritional content in tempeh plays an important role in meeting protein needs from vegetable protein sources. Tempeh price is also relatively low and affordable for various levels of society. Tempeh is more soluble in water and easy to digest compared to soybeans. During the fermentation process, tempeh is going through decomposition and simplification of the components in the soybeans, so that the components are becoming smaller and simpler. Tempeh has high production potential, yet the quality decreases as the product reaches the consumer hands. This issue occurred due to uneven population distribution and the shelf life of tempeh which is less than 48 hours.

At the time when shelf life has passed 48 hours, Rhizopus fungus will succumb, while other fungi are growing and bacteria contained in tempeh will break down protein and cause unpleasant odor, thus this will lead to difficulty in shipping tempeh products to remote areas. Apart from that, tempeh's odor may develop and smell like alcohol after 3 days. Hence, this issue is also concerning in terms of food waste, where tempeh's sellers might face difficulties in developing overripe tempeh, so these products will be wasted and cannot be sold anymore. Therefore, researchers decided to turn leftover tempeh into soy sauce to extend the shelf life of tempeh, since soy sauce can last for 3 years if preserved in a glass bottle.

This study has two variables that include length of tempeh fermentation time (three days and four days) and salt solution concentration (15%, 20%, and 25%). There were several physicochemical analysis that were conducted, including pH, color, total dissolved solids, brix, yield, and volatile aroma compounds, while the sensory analyses consisting of hedonic and just- about-right test. Data were obtained thrice for pH, total dissolved solids, brix, and yield analyses, whereas

volatile aroma compounds, hedonic, and just about right only obtained once. The pH value for soy sauce that increases
significantly is treatment 3 days to 4 days of tempeh yeast at salt concentration of 20%, whereas in 3 days to 4 days tempeh yeast 15% there were shown a significant decrease as the fermentation time increased. pH values for all soy sauce treatments are above 5 and this value will not lead to yeast growth. For color analysis, which is conducted by colorimeter, it was shown that there was a significant increase in L* value of 3 days to 4 days tempeh yeast 20%, while for a* and b* value, there was an increase for 3 days to 4 days tempeh yeast at concentration of 15%, 20%, and 25%, nonetheless the treatment that showed an increase significantly only soy sauce treatment at concentration of 25%. a* and b* value increases significantly, and this is occurred due to high contribution of maillard reaction products, as well as melanoidins that were formed during heat treatment and fermentation process. For total dissolved solids analysis, the result showed a significant increase for 3 days to 4 days tempeh yeast 25% and this is occurred due to an osmosis process that took place in the material to salt solution and length of fermentation time or dissolution of compounds from the first fermentation process.

Meanwhile, for yield value, there was an increase in the treatment of 3 days to 4 days tempeh yeast with concentration of 15% and 20%, which is due to fermentation time, the longer the fermentation time, then the more protein substrates in soybeans that will interact with protease enzymes. The volatile aroma compounds analysis
was determined by using Gas Chromatography-Mass Spectrometry (GC-MS). According to GC-MS analysis, there were 88 volatile aroma compounds that were detected in nine soy sauce sample treatments. Results showed that soy sauce treatment of 4 days koji starter 20% has the highest percentage of volatile aroma compounds compared to other treatments with the value of 28.62%, and this result represents 1,3-Difluoro-1,2,2,3,4,4,5,5,6,6- decamethylhexasilinane. Therefore, a compound named 1,3-Difluoro-1,2,2,3,4,4,5,5,6,6-decamethylhexasilinane on 4 days koji starter 20% soy sauce sample treatment gave the highest volatile aroma compounds contribution.

For sensory test, the hedonic result showed that soy sauce sample with 3 days tempeh yeast 20% has the highest panellist acceptance with value of 5.37±1.73 (range 1-9) than other samples and this result represents neutral.
According to JAR Penalty analysis, almost all soy sauce sample treatment in need of improvement at the “very salty taste” attribute.

Stevanus Wisnu Wijaya, Permata Nur Miftahur Rizki: Designing a Project Based Learning in Food Waste Reduction Digital Campaign

Currently, higher education faces a complex challenge to equip the students with hard skills and soft skills due to the pandemic which require higher education to implement online learning. Likewise, our university, during this pandemic, online learning has been implemented to all courses within the university which consequently reduce social-physical interactions amongst the students and lecturer. Whilst social-physical interactions are the backbone of knowledge exchange and softs kills enhancement amongst the learners. Certainly, the social interactions amongst learners have been moving into digital interactions. In this paper, we discuss the design of a project-based learning, namely Big Data for Social Media Campaign, which fully implemented within digital environment. Project based learning is implemented to equip the students with hard skills, such as cognitive knowledge and professional skills, and soft skills, namely real problem solving and teamwork. This course is aimed to equip the students with knowledge and skills on adopting big data technology for listening social media conversation, then develop social media campaign based on the digital conversation. This course requires the students to posses a good social network analysis knowledge, and skills to use the social media listening tool such as Node XL. In this course, food waste reduction is selected as a course project. This course is consisted of 16 weeks of online meeting where the students need to plan and implement digital campaign for reducing food waste.

The digital campaign aims to increase netizen awareness on food waste issues, provoke netizen to join the conversation for reducing food waste and develop online community on food waste issues in Instagram. The course is designed as follows:

• Week 1: Students learn the foundation of social media campaign which aims to equip the students to be able to describe social media definition and how the conversation impact to real world.
• Week 2: Students learn the social media listening technology for identifying influencers and their conversations. In this week students also decide to choose the social media platform which will be adopted for the digital campaign.
• Week 3: Students learn the theoretical framework for developing digital campaign then create strategic planning for digital campaign.
• Week 4: Students learn social media campaign design concept, then create the social media campaign design. They need to submit and share their design in the class.

• Week 5: Students need to join a guest lecturer on food waste organized by in2food.
• Week 6: Students need to learn social media engagements and start to upload their weekly digital campaign. During this campaign, the lecturer will monitor the campaign through Crowd Tangle Platform.
• Week 7: Students learn the strategy to develop effective online conversation, discuss their weekly digital campaign, reflect their digital conversations then create strategy for enhancing their conversations.
• Week 8: Midterm examination where the students need to presents their project.
• Week 9: Students learn the concept to join digital conversations then reflect the concept on their weekly campaign for enhancing their digital conversations.
• Week 10: Students learn the concept of digital engagement then reflect the concept into their weekly digital campaign.
• Week 11: Students learn principle of research and data use in social media, weekly digital campaign is continued until week 13.
• Week 12: students learn the concept of evaluating social media campaign then reflecting it to their weekly digital campaign.
• Week 13: This the final week of digital campaign, and students need to learn how to handle social media crises.
• Week 14 and 15: students need to develop final report on their project and present the project in the class.
• Week 16: Final exam to measure their theoretical knowledge and skills on listening social media conversation, plan and implement social media campaign.

At the end of this course, students are expected to possess hard skill, namely social media campaign concept and the use of big data for designing digital campaign, soft skills such as online coordination and communication amongst team members. At theoretical level, this paper will contribute to enrich the discussion on project based learning , while at practical level, this paper contribute to provide insight for higher education on developing and implementing a project based learning.

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Permata Nur Miftahur Rizki, Sesaria Kiki Tamara, Adinda Insani Putri and Stevanus Wisnu Wijaya: Design and development of sustainable waste bank Application: Case of Serang district, Banten, Indonesia

The waste management at the household level contributes a significant amount in reducing both organic and inorganic waste in the community. It should be enhanced with the implementation of Information Technology in order to achieve massive people acceptance so that a sustainable process can be attained. In this paper, we adopt a mobile application framework to develop a digital waste bank application to support waste management. A prototype system with cloud computing based technology is being designed and a pilot test of the waste bank application was launched in Serang district, Banten province, Indonesia. The result showed that our application can be accepted by most people to encourage the participation of collecting waste in the local area although there should be improvement of it. The significance of the paper is to introduce the implementation of mobile app technology for waste management and it can arouse the public awareness and participation in waste minimization.

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Desi Dwi Kristanto, Ratno Suprapto, Retno Purwanti Murdaningsih: The Influence of Visual Design on the Success of the Campaign on Food Waste

Indonesia is one of the biggest contributors to food waste. Indonesia is the second country that contributes food waste. Food waste is a big enough problem that can have an impact on aspects of life. Not a few people in Indonesia who do not understand and realize about food waste and also the impact of this food waste. The Ministry of National Development Planning (PPN) working with Bappenas and WRI Indonesia and supported by UKFCDO also presented the results of a study on Food Loss and Waste (FLW) in Indonesia in June 2021. In the report, 23–48 million tonnes of food waste were generated annually in the 2000-2019 period alone. This means that each person in Indonesia produces an average of 115–184 kilograms of food waste per year.

The amount of food waste has also experienced an increasing trend over the last 20 years, from 39 percent in 2000 to 55 percent in 2019. The most common source of generation is generated at the consumption stage and 80 percent comes from households, and the rest from non-households (such as a food stall or restaurant). Almost half of the food waste that is wasted is still fit for consumption. Bank DBS Indonesia as a financial institution that carries out sustainable business practices initiated the #MakanTanpaSisa movement in the "Towards Zero Food Waste" campaign, to encourage the public as consumers to pay more attention and care about the food they consume in order to reduce the food waste they produce.
The "Towards Zero Food Waste" campaign is Bank DBS Indonesia's effort in educating the public and raising awareness in reducing and managing food waste, as well as contributing to the provision of food for communities affected

by the pandemic and people in need, through collaboration with various entrepreneurs. social media, organizations, media, and society. This study will discuss about DBS Bank social campaign advertisements related to the effectiveness of messages, design elements and media through visual content analysis methods using a design thinking approach.

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Anna De Visser-Amundson, Joost de Vos and Robert Gallicano: Go with the flow: How changing the default can drive consumer choice for sustainable menu options

Most people tend to stick to the default option(s) offered in the same way that the vast majority of restaurant guests order from the choice of pre-set menu options. Asking for something extra or something else, requires both emotion and cognitive effort while 'going with the flow' is easier and often enough to meet the perceived consumption goals (e.g., having a nice dinner in a restaurant). This paper shows how restaurants can change the default option as an influence strategy to nudge guests to make more sustainable choices. Specifically, we demonstrate in a field setting that offering a vegetarian option as the default (i.e., the guests had to ask for the meat option) sustains the level of sales for the vegetarian option in comparison to when they had to ask for the vegetarian option and the meat was the default. Yet, when the vegetarian option is the default, it decreases the amount of meat options sold. These findings tell us that changing the default can help propel more sustainable menu choices but that it also comes with a risk and has to be done with great care as it can simultaneously drive business away.

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S.Vézina, G. Plamondon, M-E. Labonté, V. Provencher, V. Perreault, S. Mikhaylin: University food services eco-efficiency analysis: strategies to reduce environmental impacts and improve nutritional quality of the meals

In 2021, the Intergovernmental Panel on Climate Change (IPCC) stated that climate change is greatly affected by human activities (IPCC, 2021). Facing the world's climate change, the access to good quality and nutritious food products is under the threat as well. Consequently, the agri-food industry and particularly food services should change their current practices in order to tackle sustainable development goals established by United Nations (UN) (e.g. 2.Zero hunger, 3.Good health and well-being, 12. Responsible consumption and production, etc.)

(UN, 2019). At Université Laval (Quebec City, Canada), the innovative approach of meal eco-efficiency was explored to operationalize the sustainability concept in the context of university food services. The eco-efficiency was estimated as a ratio between a nutritional quality score and environmental impacts score for 12 daily meals in the university canteen. The Nutrient-Rich Food Index 9.3 (NRF 9.3) nutrient profiling tool was used to determine the nutritional quality score of the studied daily meals.

Each meal was analyzed based on 9 nutrients to encourage (protein, fiber, vitamins A, C and E, calcium, iron, potassium and magnesium) and 3 nutrients to limit (saturated fat, sugars and sodium). The life cycle assessment was carried out to evaluate the daily meals' environmental impacts. The Impact World + method was used to estimate the greenhouse gas emissions (GHG) of each meal from cradle-to-canteen gate excluding transport and packaging. The results revealed that the choice of the meal ingredients and their plate proportion can have a significant impact on the eco-efficiency scores. For example, meals with red meat or with ingredients high in saturated fat, sugars or sodium had significantly lower eco-efficiency scores compared to vegetarian meals containing a well-balanced content of protein and fiber as well as low quantities of nutrients to be limited. From an environmental point of view, meals with red meat or any other meat generally have higher carbon footprint than vegetarian meals. Following eco-efficiency assessment, specific operational actions and practices were elaborated with both the scientific team and the food service chef, to increase the eco-efficiency of the studied menus. Working with the chef was very important to ensure that the applied strategies do not negatively impact the taste of each meal. The implementation of the specific strategies on each recipe has increased the eco-efficiency by 20% on average. Moreover, the choice of more eco-efficient meals resulted in reducing overall recipe costs by 17%. This therefore demonstrates that it is economically advantageous for a university food service to improve meal eco-efficiency by improving its nutritional value while simultaneously reducing its environmental impact.

The results of this study also demonstrated that reducing food waste has a positive impact on the carbon footprint of meals and considerably reduces the costs associated with producing a meal. Food waste generated in the food service kitchen, represented 1 to 27% of the meal carbon footprint, reaching an average of 8%, which can be avoided if the proper waste reduction strategies were adopted in the studied food service. From the economic perspective, the food service pays an average of 7% more to produce a daily meal just due to the generation of food waste in the kitchen. The cost of food discarded in the kitchen for the 7 days of data collection is C$213 and over one year, this value could reach approximately C$8,200.

The general recommendations aiming at increasing the nutritional quality and reducing greenhouse gas emissions of meals served in a university food service were elaborated based on the specific strategies developed for the studied meals. First, it is recommended to promote the use of plant-based protein-rich ingredients since they are an excellent source of fiber while containing a lower amount of saturated fat than meat. From an environmental perspective, animal proteins have a much greater impact on the environment than plant- based proteins. In the case where animal proteins are used, it is secondly recommended to choose them wisely. In fact, it is possible to improve the meal eco-efficiency by carefully choosing the meat source. Indeed, poultry production (e.g., chicken, turkey) produces less GHGs than ruminant meat (beef, veal), which has an impact up to six times lower than beef, so it should be prioritized. Also, poultry contain half the saturated fat than ruminant meat and no trans-fat. However, if one desires to maintain animal proteins, one option is to replace only part of the meat with plant-based protein. This second recommendation is ideal for maintaining diversity in the sources of protein foods that constitute the meals and allows to increase fiber content while reducing the GHGs emissions. Third, it is recommended to favor low-fat dairy products to reduce the saturated fat content and GHG emissions of a meal. The fourth recommendation is to ensure a proportion of 50% vegetables per meal, as recommended by Canada's Food Guide. Fruits and vegetables are rich in fiber, vitamins and minerals and are of importance in a healthy diet. They also have an impact on the eco-efficiency since their GHG emissions are influenced by their origin and method of production. In Quebec, fruits and vegetables travel an average of 3,500 to 5,000 kilometers before arriving on our plate (CQH, 2010) This transportation generates GHG emissions. Thus, to limit all these "food miles", a supply of local and seasonal fruits and vegetables should be prioritized. However, it is recommended to prioritize fields production rather than in greenhouses production since this last mode of production has significant repercussions on the environment compared to field production, since it requires a very large quantity of energy to heat the greenhouses, especially in winter. For example, growing lettuces, tomatoes and peppers in greenhouses generates 1.5 to 32.5 times more GHGs than growing them in the field (Wong and Hallsworth 2012). Fifth, for better nutritional quality and again in line with the Canada's Food Guide, it is recommended to limit the use of highly processed foods and beverages that contribute to excessive intakes of sodium, sugars or saturated fat.

In sum, the present study has resulted in the development of a novel framework of eco- efficiency analysis allowing to tackle the sustainable diets in university food services. Moreover, a guide and calculators for nutritional and environmental scores were developed allowing the food service managers and chefs to implement the meal eco-efficiency concept in their establishments.

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Jade Lévesque, Véronique Perreault, Sergey Mikhaylin: Evaluation of food waste reduction strategies in the foodservice sector from an eco-efficiency perspective

Each year, about 1.3 billion tons of food is wasted worldwide representing about one third of the food produced. The impact related to food waste (FW) is threefold. Firstly, the resources used for the production, processing and distribution of food throughout the food supply chain are lost, in addition to the significant production of greenhouse gases caused by FW decomposition. Secondly, FW also raises questions as alongside its generation more than 800 million people suffer from hunger worldwide (FAO, 2011). Finally, FW generates a loss of revenue for all stakeholders in the supply chain, including the consumers. This last aspect leads to an increase in food prices, which contributes to food insecurity (Gooch et al., 2019). These data corroborate the conclusion of the 2019 EAT-Lancet Commission report which put forward three objectives for achieving a healthy and sustainable food system, one of which is to halve FW (The Eat-Lancet Commission, 2019). This objective is the same as the United Nations Sustainable Development Goal 12.3 (Hanson, 2017), demonstrating a global scientific agreement on the devastating impacts of FW and its role in achieving a better food system. The hospitality sector must also review its practices since it generates about 26% of the global FW produced in the food supply chain (United Nations Environmental Program, 2021). Therefore, food waste reduction strategies (FWRS) must be implemented in this sector. However, there is a lack of data about the economic and environmental impacts of the implementation of FWRS. Thus, the incentives may not be enough to convince restaurateurs to put more efforts into these strategies without knowing their real costs and benefits.

The present study supposes that the introduction of FWRS in a restaurant will increase its eco-efficiency (economic impact/environmental impact). The main goal of this work was to model the implementation of FWRS in a restaurant and to estimate their impact on the restaurant's eco-efficiency.

The food discarded by an independent restaurant situated in Montreal (Canada) was quantified and categorized by performing a three-level waste composition analysis according to its origin, avoidance potential and the type of service for which food was intended. The monetary value of FW has been estimated using the associated purchased orders and invoices. A life cycle assessment was used to estimate FW environmental impacts under a cradle to grave approach.

The categories of climate change, fossil and nuclear energy use, ecosystem quality and human health were chosen to represent the potential environmental impacts associated to FW. Following FW hotspots analysis, twenty FWRS were put forward. Then, the economic and environmental net benefits of each of them were modeled in order to estimate their eco-efficiency over three implementation durations (one week, one month and six months) and under scenarios of high and low adherence.

The results of the study indicate that approximately one fifth of the food purchased by the restaurant was discarded. FW represents 53 kg of CO2 eq., 198 PDF.m2 .yr, 1.4E-3 DALY and 385 MJ per day in terms of environmental impacts and its cost is evaluated at 189$ per day. This indicates that FW reduction has great potential as it could reduce up to 17% of the restaurant's environmental impacts and 15% of the costs associated with its food. In addition, the most eco-efficient FWRS to be implemented in the studied restaurant were identified: i.e. to reduce the number of menu items, to plan the menu according to the FW that will be generated and to provide a FW training for all the staff. Furthermore, the key factors affecting eco-efficiency of FWRS were raised in order to guide any type of foodservice establishment in identifying its own most eco-efficient FWRS. The first factor to take into account is the amount of FW that could be reduced by implanting the FWRS. For instance, global FWRS can be very effective as they can affect all FW produced in the kitchen. This is particularly the case of offering training on FW reduction to all staff. Otherwise, selecting FWRS to be implemented according to the origin of most of the FW generated in the restaurant can also be effective. For instance, there is more storage waste than plate waste in the studied restaurant than plate waste. Thus, the reduction of the menu items (aiming storage waste) has a higher potential to improve the restaurant ecoefficiency than adding a menu awareness memo (aiming plate waste). A second factor to consider is the expected environmental and economic impacts of the different food categories constituting FW. For instance, although vegetables are wasted in large amount, meat and sea products have significantly higher cost and environmental impacts. Thus, the chosen FWRS should primarily focus on these FW categories. Finally, the expected impact after a given implementation duration of the FWRS must be considered. Some FWRS require a significant monetary investment for their implementation, but an attractive return on investment can be achieved in the long term. This is the case of setting up a co-creation workshop to revalorize FW.

Thus, the innovative findings of the present study can guide restaurateurs in adopting strategies aimed at reducing FW and at improving their restaurant's eco-efficiency.

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Diah Wihardini, Yufra M. Taneo, Mustika Tarra, Eddy Yusuf: Food Loss and Waste in Indonesia: Quo Vadis?

IN2FOOD (INterdisciplinary Approach Towards Fostering Collaborative Innovation IN FOOD Waste Management) is a 3-year project funded by the Erasmus+ Capacity Building in Higher Education Program to address the complex challenges related to food loss and waste (FLW) problems in Indonesia. The IN2FOOD project consortium is led by Universitas Parahyangan in Indonesia and consists of 3 European university partners (Ghent University in Belgium, Tampere University in Finland, and Hotelschool The Hague in the Netherland) and 4 Indonesian university partners (Universitas Pembangunan Jaya, Universitas Prasetya Mulya, Ma Chung University, and Bina Nusantara University). IN2FOOD aims to develop and implement interdisciplinary curricula and co-curricular activities as well as establish a research center that can facilitate collaborative research across partners in addressing the FLW issues along with their societal challenges in Indonesia.

These activities have an ultimate goal to raise awareness of FLW among related stakeholders such as university students and staff (administrators, instructors, and faculty members), government authorities, industry, and businesses so that FLW becomes a national narrative and encourages policy-makers to include it as means to support circular economy and low carbon development. Having the fourth largest population in the world, Indonesia is also claimed to be the second-largest FLW producing country in the world, reaching 300 kg per capita per year (The Economist Intelligence Unit, 2017). According to GGGI and KPPN/Bappenas (2021), Indonesia has produced around 23 – 48 million tons of FLW per year since 2000 causing an economic loss of approximately 213 – 551 trillion rupiahs per year, which is about 4-5 % of the country's GDP. Figure 1 shows how Food Loss (FL) declined over 2 decades from approximately 61% to 45%, while Food Waste (FW) increased from 49% to 55% of the total FLW generation in Indonesia, FL occurred mostly during food production, processing, and storage stages, whereas FW was generated mainly at the distribution and consumption stages.

The sources of this FLW in domestic usage include crops, horticultural plants, livestock, and fisheries with vegetables contributing to the largest waste. Indeed, FLW has given a huge impact on the country's environment, socio-economy, climate, and many other areas. To get a comprehensive understanding of the FLW issues in Indonesia what has been done about it, IN2FOOD organised a 3-day stakeholder meeting, where representatives from each of the Pentahelix elements (academic, industry, government, community, and media) shared their points of views, experience, and best practices in tackling the FLW problems in Indonesia. Due to a strict health protocol during the pandemic in Jakarta, the meeting was held virtually for 3.5 hours each day and attended by 21 participants in total.

Three main foci were discussed during the meeting: (1) current FLW conditions in Indonesia (the what-why-who-where-when and how), (2) existing policies/best practices that have been implemented and/or are being discussed/underway, and (3) the initiatives/innovations from all layers of the Pentahelix elements to fight FLW in Indonesia. Figure 1. Percentage of Food Loss (FL) and Food Waste (FW) generation to total Food Loss and Waste (FLW) during 2000 – 2019, as adapted from KPPN/BAPPENAS (2021). For the purpose of this symposium, the IN2FOOD Indonesian team aims to present and discuss the preliminary findings of the stakeholder meeting using the DPSIR (Drive – Pressure – State – Impact – Response) framework as the starting point to form a conceptual foundation for the human-societyindustry-policy interactions as the drivers for FLW. An in-depth text analysis was conducted to extract the main themes of the discussion, which can be described as follows. o Driver – Pressure For a preliminary analysis, the team did not separate "driver" and "pressure" aspects.
We mostly looked into the probable cause(s) of the rise of FLW in Indonesia and found the following most potential causes: (1) little (or even no) awareness of the society on FLW, (2) the new (not necessarily better) lifestyle, particularly within the scope of food consumption, (3) the intergenerational culture that sometimes is difficult to change, i.e. the "me" mind-set or ignorance of the young generation, and (4) no clear and specific policies on FLW in different governmental layers in Indonesia. o State Statistics on FLW in Indonesia are often unclear and at times are conflicting. As stated before, from 2000 – 2019, Indonesia was estimated to produce between 115 – 188 kg of food waste per capita per year (KPPN/Bappenas, 2021). However, a recent report from United Nations Environment Program (UNEP, 2021) stated that it was 77kg/capita annually, using Surabaya as the study's coverage area. Last year, the Economist Impact (2021) published its Food Sustainability Index, measuring how a country's food systems performed across three pillars: food loss and waste, sustainable agriculture, and nutritional challenges, and placed Indonesia in the medium performing group (ranked 51st out of 78 participating countries) with a score of 55 on a scale of 100. Indonesia performed much lower when compared to countries with a much higher population like India (scored 72 and ranked 20th) and China (scored 64 and ranked 29th).

This performance showed that Indonesia had weak outputs and policies across those measured aspects. More research, as well as data collection and analysis, need to be conducted with a more systematic, level-by-level, approach. The data can be collected daily, for instance, from the lowest level such as a local traditional market or a local supermarket, then aggregated to the sub-district level (i.e. Kecamatan), the district level, the provincial level, and finally to the national level. o Impact From the meeting discussion, the impacts of FLW could be categorised into the following key points: (1) financial loss as it was currently estimated to be more than IDR 200 trillion annually (IIED, 2022), (2) the increased social gap as a result of the escalation of FLW situations, (3) global warming due to the energy loss produced by the food waste when it was left unprocessed, and (4) health issues since food waste is often related to habitual food consumption. o Response All meeting participants agreed that all key elements, either government, industry, or each member of the society, need to work together and collaborate to fight the staggering FLW issues in Indonesia. The IN2FOOD consortium can serve as a driving force for raising the awareness of FLW and involving academia to propose solutions through formal and informal channels. The consortium can also act as a catalyst that connects grass-root communities to policy-making bodies to design, develop, and implement policies related to FLW. The lack of clear and specific policies which govern FLW problems as well as the consistency in the implementation and enforcement of such regulations may further create an ignorant bubble within the society related to FLW. Mass-tailored campaigns which touch upon the affective aspects of the young generations through social media are seen to be an effective way to reach them.

These preliminary findings of the stakeholder meeting describe the complex situation pertaining to the FLW matters. Various stakeholders have been engaged in the web of “war on waste”, but, unfortunately, they tend to work independently, creating disconnected and isolated islands of solutions with minimal impacts. It is evident that FLW issue has yet been a national priority as a lack of definitive policies and directive measures from the Indonesian government has neglected and buried the detrimental impacts of FLW. So, where should we go from here? Further analysis of the stakeholder meeting outcomes in addition to the outcomes of the national seminar and student conference will be conducted to enrich the IN2FOOD team’s report. This study is eventually aimed at contributing to elevating a wider community’s awareness of the issue and making it become a national narrative that can coerce the government and policy-makers to do something about it.

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Yi Ying: A Review of Post-Processing Fish-Bones to Reduce Food Waste: A Case in Indonesia

According to the results of a study by the Ministry of National Development Planning/National Development Planning Agency (PPN/Bappenas) together with several institutions, Indonesia disposes of 23-48 million tons of food waste per year in the 2000-2019 period, equivalent to 115-184 kilograms per capita per year. The economic loss is IDR 213 – 551 trillion/year or equivalent to 4-5 percent of Indonesia's GDP per year. This loss is equivalent to the energy value of meals for 61-125 million people per year. Food loss and waste (FLW) is dominated by grains, namely rice, corn, wheat, and related products. The type of food with the least efficient process is vegetables, where the loss reaches 62.8 percent of the total domestic supply of vegetables in Indonesia. Emissions from FLW are equivalent to 7.29% of the average Indonesian Greenhouse Gases. The results of this study will be used as the basis for policymakers to implement Low Carbon Development in Indonesia which has become a Priority Program in the 2020-2024 RPJMN as well as realizing Indonesia's commitment to the Sustainable Development Goals (TPB). The momentum for national recovery after the Covid-19 pandemic was used to rebuild Indonesia in a better and more sustainable way through the active collaboration of all relevant parties. One of these collaborations can be started through a gradual transition from a conventional economy to a circular economy, including the issue of FLW (Bappenas, 2021). This paper about condition of fish bone waste in Indonesia, how fishbone waste can be optimized and fishbone business opportunity. This study aims to explain how fish bone waste can be optimized for business, in addition to reducing food waste. Collecting data from online newspaper articles

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Carles Sitompul1*, Theresia Gunawan1, Nina Mesiranta2, Elina Närvänen2, Johanna Renny Octavia1: Education for Sustainable Development (ESD) in Food Waste Management: An Indonesian Case Study

Today's societal challenges are different from those that our parents and grandparents have faced in the past. We are now dealing with problems that need to be resolved without compromising our future generation's ability to solve theirs. Since the Earth Summit in June 1992 in Rio de Janeiro, international concerns on the environment have been evolving into Sustainable Development Goals (SDGs) that were adopted in 2015 during the United Nations General Assembly. Since its inception in 1992, concerns on environment have been getting a lot of tractions from leaders of the world, academics, businesses and societies resulting many initiatives supporting SDGs. Responsible Consumption and Production is a major goal driven by the fact that global economy and social growth vastly affect the ability of our natural earth to sustain its inhabitants.

A well-known figure referenced for food loss and waste (FLW) in the world stated that roughly one-third of the edible parts of food produced for human consumption, gets lost or wasted globally [1]. Recent research in Indonesia shows that generation of food loss and waste is reaching 115 – 184 kg/capita/year during the period 2000 – 2009 which approximately equals to 4 – 5% Indonesia's GDP in term of economic loss. Total FLW-associated emission during those periods is estimated at 1.702,9 Mt CO_2 eq. [2]. Two major causes and drivers of this FLW are identified in the study, i.e., (1) Lack of information/ education for food workers and consumers and (2) food waste related behavior. The purpose of this study is to explore Indonesian students' food waste related attitudes, knowledge and behaviour before and after educational interventions related to food waste. Data for the study comes from a project funded by the European Commission, IN2FOOD. As part of capacity building for higher education institutions (CBHE) Erasmus+ initiatives, an interdisciplinary consortium, IN2FOOD, was set up in 2021 attempting to foster collaborative innovations in food waste management. One of the project goals is to modernize 30 existing courses taught in Indonesian universities addressing food waste management.

A wide range of expertise in the field of user innovation, food waste management and sustainable food system from EU partners in this project enable Indonesian partners to creatively design their courses to prepare future generations in solving societal challenges, particularly in food waste issues. The surveys conducted to generate data for this study have been implemented as part of the modernized courses in March-April 2022 and the respondents are students on those courses. In addition, students that are not exposed to environmental awareness during any courses are also surveyed during the same period, treated as control group in the education intervention.

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Stefanus Yufra M. Taneo, Melany, Mustika Tarra: Food Loss and Food Waste through SMEs' Supply Chain in Malang, East Java, Indonesia

Indonesia is one of the bottom 5 countries in G-20 with regards to worst-performing in food loss and food waste (FLW). One of the stakeholders critical in food loss and waste while playing a very important role in the Indonesian economy is the Small and Medium Enterprise or SME (Usaha Kecil dan Menengah or UKM), especially the Food Related SME that is connected to tourism. The tourism industry is relatively important in East Java province with Malang as a central destination for the local and international tourists. To enrich the data bank and research information pertaining to FLW within East Java, this research focuses on (1) food loss causes and quantitative data along the SMEs' supply chain; (2) food loss and waste management and the relevant reduction and preventive efforts; and (3) the establishment of how far the SMEs cooperate with relevant tourism partners in marketing their products. Data was collected through an online questionnaire of SME Communication Forum (Forum Komunikasi Pelaku Usaha Kecil dan Menengah). The result will show how significant FLW is along the SMEs' supply chain. This research will also explain how food-related SMEs in Malang have initiated the reprocessing of FLW on a very small scale. A large part of FLW is still discarded by SMEs. At the same time, very few SMEs are aware of the laws and regulations relating to Waste Management passed by the government, and an even smaller number of SMEs have actual systemic plans to reprocess FLW. This research also finds that SMEs have great potential to cooperate with the tourism business sector to market their products but have not been used optimally.

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Vrameswari Omega Wati & Ratih Indraswari: Make A Difference: The Prospect of Indonesian Youth Movement in Addressing Food Waste Problem

The increasing world population has an impact on the food waste problem. A study conducted by FAO shows that more than 1 billion tons of food waste is generated from human consumption in the world per year (FAO, 2015). In the European Union, approximately 88 million tons of food are wasted, with the estimation between 158 and 298 kg per person per year of food was dumped in 2006 (European Commission 2010 & Swedish Environmental Research Institute, 2016). What happened all over the world is a painful fact considering that the problem of hunger remains a global issue. In the case of Indonesia, a recent report by the National Development Planning Agency found that Indonesia disposed of 23 to 48 million tonnes of food waste annually from 2000 to 2019, the equivalent of 115 to 184 kilograms per capita per year (Lukman, 2021). However, the country is still struggling to deal with undernourishment and malnutrition, and those issues are a major issue in Indonesia's food security development (Lukman, 2021). Food waste then becomes an interesting issue to be studied because its impact is related to other sectors, such as economic, environment, and social. The high amount of food waste produced by each person per day makes food waste management an important thing to do. On the basis of this urgency, finding solutions to food waste management is an immediate need.

Research on addressing food waste comes from varied angles. Ranging from policy focus (See Vasquez, 2007; Jereme, 2016), to supply chain and food waste system sustainability (See Karki, 2021; Papargyropoulou, 2014). Importantly, the research has generally agreed that in addressing the issues of food waste, interdisciplinary and multi stakeholder approaches are needed. A recent study related to consumption said that the youth is regarded as a consumer group, which is the most prone to food waste (Marek-Andrzejewska and Wielicka-Regulska, 2021). The study concludes that youth are considered as one of the most wasteful consumer groups and contribute significantly to food waste at the household level.

Therefore, youth's food-related behavior and intentions should be investigated with greater attention. Further, there is also an urgent need to take action that will affect youth that leads to behavior change (Marek-Andrzejewska and Wielicka-Regulska, 2021). Young people are not only revealing the full range of food waste behavior but also participating in the zero waste movement and advocacy (Marek-Andrzejewska and Wielicka-Regulska, 2021). Therefore, this paper aims to further explore the role of young people in dealing with food waste in the Indonesian context.

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Marije Noordhoek, Ageeth van Maldegem, Maarten Soeters, Sophie Adriaanse, Harm Ijben: Exploring the archetypes of sustainable business models in tourism

Constantly growing consumption levels are exhausting natural resources. Rising demand also poses substantial challenges for the tourism industry: due to increased use of space and resources, the pressure on nature and society constantly increases (Battistella et al., 2018; Moscardo et al., 2013). To be futureproof, tourism businesses will have to consider sustainability as part of their business model (Rajah, De Fauconberg and Woeffray, 2021). This means they will have to adapt their activities, collaborations, and revenue models to positive social and ecological values, thus going beyond mere financial interests (Lüdeke-Freund et al., 2018).

Despite the industry seemingly lagging behind in terms of reporting on their sustainability activities (Turner and Freiermuth, 2017), the sector does appear to be well aware of the wide range of economic, social, and ecological impacts it is generating (Klijs et al., 2021). This broad sense of responsibility is also apparent in the sustainability actions of tourism businesses. Examples of this can be seen in Zeeland, where tourism has a significant economic impact on the region

(Korteweg Maris et al., 2020) and efforts are made with regard to the construction of circular holiday accommodations and waste management (see e.g. Balkenende, 2021; Interreg 2 Seas, n.d.). However, despite this first sustainability wave, for many individual businesses in the tourism industry it is still not easy to adapt their business model and to embed societal value in their business model (Mihalič, Cvelbar and Cvelbar, 2012).
Inspiration for sustainable business models can be found in business model literature, more specifically in the archetypes for sustainability. Such archetypes describe typical patterns, sets of basic components for a sustainable business model. These archetypes are valuable because they offer a shared language for the actors within a region or industry to enter into a dialogue about sustainability solutions. Archetypes illustrate the range of action perspectives and others can use them as guidance in the design of new business models. (Lüdeke-Freund et al., 2018). This will further accelerate sustainability improvements and reduce implementation risks. A literature review shows that the current literature does not offer a description of archetypes of sustainable business models in the tourism industry. It currently describes archetypes of sustainable business models in general terms, for example such as "upgrading" or "social business model: empowerment" (Lüdeke-Freund et al., 2018). Other available archetypes are based on cases from manufacturing industries. (e.g. Bocken et al., 2014; Jonker, Faber and Haaker, 2021; Pieroni, McAloone and Pigosso, 2020).

Notwithstanding the significant impact that manufacturing industries have on our living environment, the positive impact of sustainability initiatives within tourism should definitely not be underestimated. This is because tourism intersects with many human practices and therefore plays an important role as a catalyst for increased well-being in a region (Battistella et al., 2018). Despite of this important role for tourism, the various practical examples found within the sector have not yet been translated into archetypes. This study fills that gap and thereby responds to calls for research on industry-specific archetypes (Pieroni, McAloone and Pigosso, 2020).

In this first explorative study, a start is made with the description of archetypes in the accommodation industry. The choice for this type of tourism business was practical in nature and arose from the fact that sufficient research material was available. Research activities were based on a case study research approach among 10 selected companies. Cases were selected from a long list of potentially interesting businesses nominated by five researchers of the HZ Kenniscentrum Kusttoerisme (HZ Research Centre Coastal Tourism). Selection took place by means of four selection criteria : sustainability ambitions, 2 core activities, geographical location, engagement in sustainability projects in subsidy programmes, such as the Interreg 2 Zeeën (2 Seas) programme FACET. Data was obtained from an extensive document study. To enhance credibility and quality two exploratory interviews were added. Data analysis was performed by a team of five researchers. They systematically coded activities that were labelled in the texts and interviews as sustainable. Looking beyond such activities, arguments for undertaking these activities, were coded as well. To ensure coding consistency, the team jointly developed decision rules. In an iterative process, interpretations were checked and revised, thus ensuring a replication logic (Yin, 2014). Emerging codes were compared with extant models in the literature and refined when needed. They were found to partly match with the archetypes identified by Bocken et al. (2014). These archetypes include: Maximise material productivity and energy efficiency; Create value from 'waste'; Substitute with renewables and natural processes; Deliver functionality, rather than ownership; Adopt a stewardship role; Encourage sufficiency. The combination of data sources and analysis techniques offers a good first impression of the sustainable business models. The findings show that very few businesses prominently promote their sustainability ambition. Most businesses state what they are doing, without linking it to a more fundamental vision or ambition. This gives the impression that sustainability practices are not well grounded yet in a strong (intrinsic) motivation.

Observed sustainability efforts remain primarily within the boundaries of the own organisation, with particular attention for material flows and waste. This high focus on ecological value, relates to the wish for tangible results, easily linked to economic consequences , such as for example lower waste costs. As such, it appears that financial considerations are an important influence factor on the road to sustainability. Only very few businesses take a follow-up step and try to create value by entering into new collaborations or by developing new value propositions. Such new collaborations are importantly driven by the wish to engage in sustainable purchasing and to enforce regional ties. These bservations give rise to four new archetypes: sourcing of biobased materials, sourcing of circular materials, local sourcing, and sustainable sourcing.

Overall, the observed archetypes fit within seven overarching themes, each with a characteristic set of underlying archetypes and revenue models. The themes are: Eco-Experience, Nature Restoration, Ownership for Mobility, Eco-Gastronomy, Producer of Public Goods, Value Retention of Locations. The paper further elaborates the themes and presents the case material. The findings in this paper are a first step towards a shared business model language for the tourism sector. This language makes empirical follow-up research possible. Simultaneously, the archetypes offer practical guidelines for entrepreneurs who seek to embed sustainability in their business model. This enables further acceleration of sustainability in the tourism sector. This study was the first, explorative step in a wider research programme into sustainable business models in tourism. Its focus on the accommodation industry makes it difficult to generalise to other types of tourism businesses. In follow-up research, the results will be validated among a larger group of businesses. An important follow-up question, arising from our study, concerns the sustainability motivations of entrepreneurs and how these evolve as more experience with sustainability initiatives is acquired. A second important theme concerns the transition of business models and in particular how businesses evolve from limited sustainability efforts within their own enterprise towards a position in which they assume a broader responsibility for a sustainable region. This should include research into the interactions between tourism businesses and the broader range of actors in the regional eco-system. A final theme for follow-up research concerns the conditions, as well as the performance of different archetypes of sustainable business models.

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Valentina Clergue: A Well-Being Hospitality Brand Image and Its Impact on Consumer Experiences and Reactions Towards the Brand

A holistic lifestyle enhances and improves physical, mental, and spiritual well-being. Well-being is associated with numerous benefits in different domains such as health, family, and work. Against this background, some hospitality brands have shown interest in incorporating well-being in their offers. Considering that individuals put a higher importance on a holistic lifestyle and have clear expectations that brands should contribute to that, the current paper investigates the impact of a well-being brand image on consumer reactions toward the brand and studies whether integrating well-being into hospitality brand offering enhances guests' experience and subjective well-being.

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Yasemin Oruc and Tanne Luttik, Exploring socio-cognitive mindfulness in the context of city tourist experiences

Introduction: Keeping in mind the increasing popularity of city tourism and the negative consequences that, unfortunately, come with it, the present study aims to deepen our understanding of the tourist experience and identify ways to encourage a change in tourist behaviour by researching the mediating role of socio-cognitive mindfulness in the relationship between interactivity and presence of guides. Interactivity and presence of guides are site factors, either absent or present, that play an important role in how an experience is perceived by tourists. Adding to this, socio-cognitive mindfulness is the capacity to draw novel distinctions, be attentive and actively analyze information in the context of one's environment.

Method: The study employs a 2*2 experimental factorial between-subjects design with random assignment to four conditions that ensured manipulation of the two independent variables, with mindfulness as additional mediating variable to test the hypotheses amongst tourists and visitors of the Old-West neighbourhood in Amsterdam. A total of 104 respondents were reached.

Results: The study confirms the hypotheses that interactivity and presence of guides have a significant direct effect on the tourist experience, yet no interaction effect between the two site factors has been found. Furthermore, the results show that mindfulness mediates this relationship for both site factors.

Conclusion and practical implications: The findings indicate that when a site is interactive and provides guides, tourists have a more positive and memorable tourist experience. In addition, this relation is explained through mindfulness, meaning that both site factors lead to more mindful tourists, and this in turn leads to a more enhanced tourist experience. It is essential for cities like Amsterdam to adopt site factors such as the two researched in this study to ensure a more pleasurable, meaningful, and memorable tourist experience and herewith support sustainable tourism and Amsterdam being a future-proof destination.

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Theresia Gunawan and Magdalena Erlina: Green Hotel Adoption in Indonesia: Consumer Perception and Trust

Before Covid 19 pandemic, the Indonesian tourism industry showed significant growth every year. The industry, however, was most economically affected during the global pandemic in 2020. Although there was a sharp decline in foreign tourist arrivals yea r-on-year, from 1.388,719 visits in September 2019 to 153,498 visits in September 2020, Indonesia is still gaining the trust of the international community as a tourist destination by being chosen as the host of the 2021 Global Tourism Forum (GTF) Annual Meeting (Tempo.com, 2020). The increase in tourist visits, both from local and foreign, is expected to increase hotel occupancy rates in every region of Indonesia. Indonesian tourism should improve both its quantity and quality to encourage the success of sustainable tourism development.

Improving the quality of accommodation facilities, both physical and management, should consider environmental issues such as climate change, global warming, and environmental damage. These issues are public concern that makes people more selective in choosing hotels. These concerns are both a challenge and an opportunity for tourism industry p layers, especially the hospitality business, to develop their business strategies around environmentally friendly or green hotel concepts. By applying this concept, the hotel's competitiv e advantage will also increase. The green hotel concept is believed to not only increase the hotel value and success in the long term but also provide comfortable accommodation, prioritize health, meet the basic standards set for protection against the environment and its impacts, and ca n improve management performance in a sustainable manner (Lee & Cheng, 2018) (Jones et al., 2014).

The Indonesian Ministry of Tourism and Creative Economy encourages Indonesian hotels to apply the eco -friendly or green hotel concepts by providing several awards and guidance to hotels for the implementation in the field (Kemenparekraf, 2020). The government widely promotes the environmentally friendly tourism campaign to change the paradigm of both the consumers and industry players so that they can transform the market into a more environmentally aware with the aims to protect and preserve nature and minimize the damaging impact that affects the industry's sustainability. The consumer is one of the factors for successful going green efforts. The consumer decision to choose a particular hotel is strongly affected by various factors originating from the background and level of consumer knowledge, awareness of the environmental issues, and their daily life experience (Jiang & Gao, 2019). The green hotel best practice implementations may cause a variety of responses from consumers. A higher rate of repeated guests, high levels of customer satisfaction, and increased consumer awareness to disseminate informa tion about their stay at a green hotel are some positive responses that indicate an increase in customer loyalty (Moise & Gilsaura, 2020). There may be other consumer responses that can be highlighted as well so that the hotels can find out other factors that affect the consumer purchasing decisions. These factors may enable the hotel to achieve its service excellence to consumers while providing experience and education on the benefits of implementing the green concept since consumer awareness to choose a green hotel is still lacking. This lack of awareness can be because not many hotels are certified green hotels since transforming into green hotels needs a large investment to change the hotel's resources to meet the green concept requirements. Price sensitivity due to the negative stigma that green hotels are more expensive and the "greenwashing" campaigns from several hotels cause consumer skepticism to choose green hotels and their decision to make return visits. This phenomenon is a diversion of issues, a corporation discloses positive environmentally friendly attributes but hides negative things that make a misleadingly positive impression (Rahman et al., 2015).

We briefly interviewed several experienced hotel guests who stayed in at least five different hotels within the last year. Th ese guests have stayed in hotels that offer various facilities, such as a beautiful environment, a large green area, refillable containers (e.g., shampoo dispenser), a self-service drinking water refill, and a hotel with a non-changing towel and bed linen policy. They still feel comfortable with these kinds of facilities. They also understood the purpose and felt happy to contribute to the environment. However, some respondents are not willing to pay a higher price to stay at a green hotel when they think they can find another more comfortable hotel at th e same price. This indicates that the green hotel's implementation does not necessarily guarantee a positive response from consumers (Balaji et al., 2019). Consumer responses differ due to various factors that cause negative opinions or consumer skepticism towards green hotel claims (Rahman et al., 2015). Therefore, we need further studies to understand consumer perceptions and evaluate how consumers can well-received the green concept and encourage consumer interest to repurchase the product. There has not been much research that links the green hotel's practice and consumer perceptions of that practices in developing countries, including Indonesia. This study aimed to analyze the effect of perception of green hotel attributes on guest responses. The considered responses a re attitude, intention, and willingness to pay a premium price to stay at a green hotel. This study also analyzes the role of trust as a mediator. The research hypothesis is as follows: "Trust in green hotels mediates the effect of perceptions of green hotel attributes on guests' attitude, intention to stay and willingness to pay premium price". This research is quantitative research by distributing questionnaires using the purposive sampling technique for the data collection of 152 valid sample respondents. Partial least square (PLS)-Structural Equation Model (SEM) was used as the analysis method to examine the effect of the variables supported by the SmartPls 3.0 software system.The findings also revealedthat the role of trust is important in mediating the influence of perception of green hotel attributes toward guest intention and plays a partial mediation role in the relati onship between green hotel perception and guest attitude. However, trust cannot mediate the relationship between the green hotel perception and willingness to pay a premium price to stay at a green hotel.

From the result, we suggest that: 1). The introduction of green hotel attributes and trust can be carried out through green hotel certification, education from environmentalists, brand ambassadors, direct education in green hotels needs to be improved bec ause this will increase consumer trust in green hotel attributes and increase positive attitudes towards green hotels. 2). The increase in guest intentions can be done by sharing the experiences of guests. 3). Performing an analysis of the ERRC concept (Eliminate unnecessary things, R eduction of things related to waste of resources, raise factors that can increase the quality of green hotels, and create added value that has not been done by competitors).

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Isabelle Son and Jean-Pierre van der Rest: Heterogeneity in Internal Reference Price Formation: implications for micro-level CSR analysis

Whereas personality traits such as price consciousness have been found to impact the utilization of specific reference prices, little is known about the psychological mechanism that explains how consumers form an internal reference price. With a between-subjects design, interviewing 1,823 participants before they entered a supermarket or immediately after their product selection at the shelf, we analyze the use of 77 reference prices (e.g., past price, fair price, expected price). Via cluster analysis and factorial repeated-measure ANOVA lifestyle segments are found that apply different sets of reference prices in the formation of internal reference price. Implications for deceptive pricing practices are discussed and how this can impact CSR performance, in particular metrics that will enable micro-level CSR analysis and the prevention of harm to customers.

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Naurissa Biasini, Suci Marini Novianty, Emma Rachmawati Aliudin: Environmental Communication Strategy by Eco-Sustainable Accommodations to Gain Impact and Awareness

As one of the world's famous tourist destinations, Bali is still the main choice of tourist location for domestic and foreign tourists. However, in recent year environmental problems have become a concern for the local government of Bali due to tourism activities. Plastic waste to food waste is one of the problems that the Bali local government wants to suppress. This is then supported by various resorts and hotels in Bali. Various accommodations have changed the concept or built new ones with the Eco- Sustainable concept. This program becoming the pathways for tourism and hospitality businesses to enhance the positive impacts and minimize the negative impacts. In carrying out this eco-sustainable system, of course these accommodations cannot work alone.

Collaborating with local governments to local communities is one way to be able to run an eco-sustainable system in a well-planned manner. In addition, they must also provide a good understanding of the guests or customers who are and will be staying, and to various other stakeholders. To provide good understanding, the accommodation must have a planned environmental communication strategy so that messages related to sustainability are conveyed properly to these stakeholders. After all, not all guests or related stakeholders have the same awareness regarding the environment, so it may cause inconvenience in using the facilities or adapting to accommodation rules that are different from other accommodation standards. These accommodations also need supports especially from local communities and government to maintain their aims in sustainability.

This study aims to determine the environmental communication strategy carried out by Eco-Sustainable Resorts in increasing the impact and awareness of guests regarding the environmental sustainability program being implemented. In this study, several concepts related to environmental communication, communication strategies, effective communication, communication channel, socialization processes, to help obtain results in accordance with the research objectives. According to Eschborn environmental communication is the planned and strategic use of communication process and media products to support effective policy-making, public participation and project implementation geared towards environmental sustainability. This research was conducted using a constructivist approach with qualitative analysis methods. Researchers conducted in-depth interviews with related parties from three accommodations with Eco-Sustainable systems in Bali. In addition, researchers also document the forms of communication media carried out by each accommodation. Interviews were also conducted with several hotel stakeholders to confirm the communication strategy that had been implemented. The analysis was carried out with three stages coding, open coding, axial coding, and selective coding. While the data testing method is carried out with confirmability by reconfirming the results of interviews with informants. Non-participant observation also used to document several form of communication media and practices conducted by the accommodations There are three accommodations that are planned to be the object of this research, namely Fivelements Ubud, Suarga Padang Padang Boutique Resort, and Mana Ubud. The three accommodations run an Eco-Sustainable system that emphasizes the three pillars of sustainability, environmental, social, and economic. Fivelements Ubud for example, their intention is to move their operations beyond the sustainability of Green Building and into the realm of Regenerative Design. They are also conducting their efforts in focusing their impacts in some categories, such as: water, energy, materials, waste, and indoor environmental quality. Suarga Padang Padang Boutique Resort strives for each guest to experience something timeless-instilling an insatiable desire to be part of the solution, starting with the implementation of small lifestyle changes. The third accommodation is Mana Ubud which strive to be ecologically- and socially-minded in every way possible through our earth bag villas, probiotic restaurant, and conscious store. They believe that tourism can be positively contribute to social and environmental issues. Through sustainable practices and innovative eco-technologies, Mana Ubud aims to be part of the,solution, not the problem. These three accommodations were built for different purposes. Some are indeed built with the concept of sustainability as the main goal, some are built with a concept that prioritizes wellness but are accompanied by the concept of sustainability as part of an effort to live in harmony with nature. This difference makes these three accommodations interesting to study regarding how they implement a communication strategy to convey an effective environmental communication message.

In carrying out their sustainability program, the three accommodations certainly need to implement a good communication strategy with stakeholders. A communication strategy is needed so that environmental communication messages can be conveyed effectively. Stakeholders who become communicants in this program are actually not only guests, but also employees, local communities, to the local government level. We use the four stages and ten steps towards an effective communication strategy. The first stage is assessment, consists of three steps, situation analysis and problem identification, KAP analyses, and communication objectives. The second stage is planning, consists of three steps which are communication strategy development, participation of strategic group, and media selection and mix. The third stage is production, which consists of two steps, media design, and media production and pre-testing. The last stage is action and reflection, consists of two steps, media performances & field implementation, and process documentation and monitoring and evaluation.

Based on the pre-research observation, the three accommodations use various digital communication media to explain their sustainability concept. Several forms of digital communication media used are websites and Instagram. On their platform, mostly the messages about their eco-sustainable program are intended for their guests. Some posts or information in their digital communication media have good engagement or feedback, but some do not get a satisfactory response. It is also interesting to explore how they evaluate the form of communication they do. The results of this study are expected to be input for various accommodations with eco-sustainable systems in carrying out effective communication strategies in conveying environmental communication messages.

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Carlos Juiz and Cristina Brunet: Delving the impact of CIOs on Hospitality Firms

This work is framed within the discipline of governance of Information Technology (IT) in organizations. More and more importance is being given to IT, and its use has become essential for most companies in the tourism sector. To apply good IT governance practices, there must be a person in the organizations who leads them to achieve the strategic business objectives. Chief Information Officer (CIO) is the key structure that should guide IT within the organization. The objective of this work is to carry out a study on the role of the CIO within the four big multinational tourism companies that are currently based in Majorca (Spain), representing more than 77 K employees and a turnover of more than 5.76 K million € in total.

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Craig Webster and Stanislav Ivanov: Robots in Museums and Galleries: Public Perceptions of Appropriateness

This research focussed upon technological innovations and the way that the public ascertains the appropriateness of the use of technological innovations in museums and galleries. As such, this research explores the way that the public views the ethical consequences of technological innovations. With the increase in technological capabilities and the decrease in the labour available in many service industries in developed countries, the increased automation of tourism and hospitality industries will take place. One of the issues to be faced by those forces is the willingness of the public to accept services being offered by robots and artificial intelligence in a setting that has traditionally used a great deal of human labour for the provision of services. As such, the exploration of how the public perceives the use of robots and artificial intelligence in a museum or a gallery is viewed as acceptable or unacceptable is an ethical issue, since it may be viewed as the use of technologies to replace human labour but may also be viewed as innovations that create better services and a better visitor experience for those visiting museums and galleries.

Summary of theory and hypotheses

Previous studies have found that robots' usefulness is positively related to the perceived value of service robots while functionality is positively associated to the intentions to use robots. Furthermore, the perceived advantages of robots compared to humans have a positive relationship with the attitudes towards the use of robots while the negative effect of the disadvantages is eliminated when general attitudes towards robots are considered. Finally, people expect and appreciate emotionally-programmed robots and emotions are important in creating museum visitor experience. Considering the above, the following hypotheses are formulated:

H1: Perceived robot usefulness is positively related to the appropriateness of robot use in museums and galleries.
H2: Perceived robot functionality is positively related to the appropriateness of robot use in museums and galleries.
H3: Perceived emotional skills of robots are positively related to the appropriateness of robot use in museums and galleries.
H4: Perceived robot advantages compared to human employees are positively related to the appropriateness of robot use in museums and galleries.
H5: Perceived robot disadvantages compared to human employees are negatively related to the appropriateness of robot use in museums and galleries.
H6: The attitude towards service robots in travel, tourism and hospitality is positively related to the appropriateness of robot use in museums and galleries.

Research design and approach to data analysis (where applicable)
In order to learn about the attitudes of people towards robots in the various components of the travel, tourism, and hospitality sectors, a major online survey was fielded from March 2018 to October 2019. The survey was developed in English with the input of experts in the field and then translated into 11 other languages by native speakers, since the intention was to gain as much of a global response as possible. The online survey was distributed through social media and invitations by email and all respondents were required to be over 18. The permission to field the survey was granted by the IRB of the lead author's university, which also approved of the incentive provided to the respondents. During the fielding of the survey, responses were collected from about one hundred countries. To learn about how respondents perceived uses of service robots in museums, they were asked to respond to several prompts with a seven-point scale. The survey asked of respondents, "Please indicate which activities do you personally consider as appropriate to be performed by service robots in travel, tourism, and hospitality." Respondents were provided two options in which these technologies could be used in a museum environment: "Providing information about the exhibits" and "Robot tour guide in the museum / gallery." Data analysis illustrated the attitudinal and demographic correlated associated with the appropriateness of using robots in museums and galleries.

Key findings and practical and theoretical implications
In general, the regressions illustrate that the best indicator of positive perceptions towards the use of robots in museums and galleries is the usefulness of service robots (H1), followed by the emotion skills of robots (H3), general attitudes towards the use of robots in the travel sector (H6), the advantages of robots relative to humans (H4), and the frequency by which a person travels, as shown by the impact of the standardized coefficients in Model 4. Therefore, hypotheses H1, H3, H4 and H6 were supported, while H2 and H5 were not. The findings of this research illustrate several noteworthy theoretical findings. First, the data show that perceptions of the usefulness of robots in tourism seem to be most closely associated with the perceived appropriateness of the use of robots in museums and galleries. Therefore, if museum visitors consider that robots will be useful in their travel experience, they will support their implementation in museums and galleries. In that regard, the findings indirectly support previous studies that found that the perceived usefulness of robots is driving their acceptance and adoption Second, it seems that people with more positive opinions about the emotional skills of robots are also supportive of using robots in museums and galleries. This supports the research of previous research in that it indicates that consumers do expect and appreciate emotionally-programmed robots. While visitors understand that they are dealing with a machine, they have some expectation that the manufactures will have designed the machinery to exhibit and interpret human emotions. This suggests that future iterations of robots will not only have to deliver a service but also have to interact with humans in ways that humans expect to be treated by a human, to some extent and echoes previous findings with regards to the use of robots in museums. Third, what is especially interesting is that those who are most likely to see the advantages of robots compared to humans are more likely to be supportive of using robots in museums and galleries, although the disadvantages play no role in opinions of using robots in museums and galleries. This suggests that people are willing to discount the disadvantages of robots relative to humans in terms of the use of robots in museums and galleries, although they do not do so with regards to the advantages of robots over humans. In that sense, the findings reveal that respondents focus on the positive aspects of robots rather than the negatives. Finally, demographics play very little role in conditioning the perceptions of the use of robots in museums and galleries. From a managerial perspective, the findings reveal that the marketing communications of cultural institutions such as museums and galleries that implement robots need to emphasize the usefulness of robots and their emotional skills as they are positively related to the perceived appropriateness of robot use. Furthermore, robot manufacturers and travel-related businesses would be wise to look into the attitudes towards robots, since convincing the public of the benefits of using robots in tourism will likely make it easier to

incorporate robots into museums and galleries, since there will be less suspicion and resistance to it from the public. Research with regards to the perceptions of how technologies will displace human labour in hospitality and tourism should be further explored.

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Klaas Koerten, Hospitality Robotics: Merging Two Research Fields

Robotic assistance for work processes in the hospitality industry is receiving increased attention in academic research. Unfortunately, academic literature about hospitality robotics is currently disjointed, making it hard for hospitality professionals to decide which processes to target, and which available robotic systems would result in benefits (or limitations) for the organisation, employees, or guests. Similarly, it is hard to understand what robotic functionalities need to be developed for a particular process, or what future functionalities to expect from ongoing developments in the robotics field. Researching hospitality robotics requires expertise in both fields. To give an insight in the things that should be considered when evaluating the effectiveness of robots in a work environment, we present a conceptual framework of the different interactions that a robot brings about.

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Evelina Gillard: Frontline employee perceptions of service robots: Conceptual framework development

Originality/value: This is the first conceptual paper that examines frontline employee perceptions of service robot deployment from human resource management perspective. Purpose: Employee perceptions of Human Resource practices are central for understanding job attitudes (Boxall & Purcell, 2016). Ongoing service industrialization and technological diversification unfolding with the Fourth Technological Revolution increasingly impacts job design, the foundational practice in Human Resource system, notably through service robot deployment (Demir et al., 2019; Gonzalez-Aguirre et al., 2021). This is a particularly salient development for frontline service employees interaction with AI in customer facing roles delivering service that customers may perceive as successful or failing (Belanche et al., 2020; Blöcher & Alt, 2021; Demir et al., 2019), which is a critical role in hospitality organizations. In this case, robots and AI technology augments the job performed by employees (Blöcher & Alt, 2021; Budhwar et al., 2022). Currently, the majority of studies on robotics are focused on technological aspects, such as robotic technology acceptance (Fuentes-Moraleda et al., 2020; Gursoy et al., 2019; Zhang et al., 2021) at individual level among consumers without considering the employee perceptions. However, technology diversification literature points out that social perception underpinning such attitudes and technology are interrelated (Orlikowski, 2000). More particularly, empirical research in hospitality management has demonstrated that robot and AI deployment has a profound effect on organizational culture, leadership, and human workerartificial intelligence (AI) teamwork (Xu et al., 2020). Ongoing digitalization progress through robotics, AI, 2 and associated technologies calls for further research about the way how organizations, individual employees, and technology are related (Baptista et al., 2020; Ceipek et al., 2019). For this reason, robot and AI deployment in teams is receiving a growing attention in hospitality management (Xu et al., 2020) and human resource management (HRM) field (Arslan et al., 2021). While job attitudes of employees with customer-facing roles play a particularly important role in service delivery process, customer satisfaction, and ultimately service form performance, it remains unclear how service robot deployment influences attitudes of these frontline employees. This paper explores employee reactions to service robot deployment in human worker-AI teams.

Method: This study adopts a conceptual approach rooted in attribution Human Resource Management, robotics and AI literature to explain frontline hotel employee reactions to service robot deployment.

Findings: First, this study draws upon the robotics and AI literature to explain employee perception of service robot implementation at the frontline of customer service (1). Research on human-robot interaction in teams pointed out four main aspects of human workers-AI team interaction dynamics, including task expectations (Arslan et al., 2021). Setting task expectation belong to job design as Human Resource practice (Boxall & Purcell, 2016). This is the first, foundational practice that influences all the other practices consequently implemented. Three other dimensions outlined in previous research, including workers' anxiety about AI/robot, trust, and most importantly, performance evaluation, depended on job design that included task expectations as a part of job description, but also job specifications that include personality traits (Boxall & Purcell, 2016). This points to the importance of job design as the foundational HR practice in service robot deployment.

In order to set task expectations in human worker-AI teams, previous research pointed to the importance of communicating task specification clearly, provide a clear account of the output expectation and explain the task flow (Arslan et al., 2021). Communication to employees is central to the attribution HRM theory explains the various effects of HRS and its features in an organization from employee perspective. Attributional HRM suggests that employees' perceptions of HRM have an effect over their reactions and performance. Notably, it emphasizes the HRM delivery process as internal sustainability factor. The authors of the Human Resource strength (HRS) theory have drawn upon signaling theory to argue that appropriate HRM content was not sufficient to implement the HR practices in such a way that they would exercise sustained influence over employee reactions. Organizational HRM communication allows employees analyzing and evaluating the HRS, thus facilitating the sensemaking. Accordingly, the employees perceive HR practices as communications from the employers (Bowen & Ostroff, 2004; Ostroff & Bowen, 2016; Wang et al., 2020).

For the aforementioned reasons, this paper also draw upon the HRS theory from attribution HRM field (2). The HRS theory has developed its central premise that managers should send clear signals about the intentions underlying the HR practices through development of a "strong HR System", so that HRM could be implemented effectively. The HRS theory stipulates that three HRS features should be clearly signaled to employees regarding the formal HR practices, rules and procedures: distinctiveness, consensus, and consistency (Bowen & Ostroff, 2004). By consequence, the HRS system uniting the HR practices into bundles supporting HR strategies maintains employee reactions, necessary for achieving organizational viability, and this theory could be particularly instrumental for explaining frontline employee reactions to deployment of human worker-AI teams.

By drawing upon the robotics and AI literature (1) and HRS theory (2), this paper develops a framework of frontline employee perception of human worker-AI teams with service robots making a twofold contribution. First, this paper contributes to current literature on service robots and human resource management by examining reactions of frontline employees as organizational members, while the majority 4 of current studies examined reactions of employees as individuals. This paper builds on attribution Human Resource Management literature on Human Resource strength to explain employee reaction to service robot deployment in human worker-AI teams through shared expectations attenuating individual differences.

Second, present study proposes an explanation the connection between service robot influence over task expectations included in job design, HRS, and employee attitudes in human worker-AI teams. this paper expands the line of argument developed about hotel customer experience in robotic and AI interaction (Wirtz et al., 2018) to propose that higher functional emotional-social and cognitive-analytical complexity of the task performed inhuman worker-AI team influences frontline employee perceptions. It is plausible to propose that a higher functional complexity reinforces HRS through increased human-robot interaction, which in turn influences employee attitudes. As result, this paper explains how service robot deployment in the context of human worker-AI

teams influences employee attitudes, such as job satisfaction as one of major job attitudes, alongside with job engagement and turnover intention.
Practical implications: This paper provides practical suggestions for designing effective HR practices for frontline employees in order to support successful service robot deployment. Job augmentation through robots and AI technology enhances work and supporting human workers in their task delivery (Blöcher & Alt, 2021), as well as offers new venues for managing talent, enhancing employee engagement and other positive job attitudes (Budhwar et al., 2022). So, this paper underscores the importance of communicating about the way how teaming up with robotic and AI technology may augment the job, enhance it, and support employees for delivering better customer service. It demonstrates the importance of sending strong messages to employees about top management support (Sanders & Yang, 2016; Wang et al., 2020). Notably, this paper points out the need to communicate distinctively about the way how worker-AI teams may contribute to employee well-being over time through better work-life balance, lower stress, learning, development, and career opportunities. In this way, service robot deployment is likely to result in positive job attitudes, such as a higher job satisfaction and greater engagement.

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Andreas Strebinger and Horst Treiblmaier The Impact of Culture on the Adoption of Hotel Booking Apps Using Blockchain

Blockchain technology can transform the tourism and hospitality industry through peer-to-peer hotel bookings with little or no involvement of intermediaries. Some of its outstanding features are its distributed form of storing data, its collaborative way of identifying the "true state" of a system and the immutability of data (Treiblmaier, 2019). These characteristics of blockchain technology might lead to a perceived loss of control among travelers. Despite the high theoretical and practical relevance, the body of empirical research on the impact of cultural values on the adoption of new technologies by travelers is surprisingly limited (Amaro & Duarte, 2017). Modern technologies like Blockchain are regularly characterized by non-transparent dependencies between input and output (Cliff et al., 2011) and are inherently difficult to grasp and control for the individual user (Boukis, 2020). This brings the perceived controllability of a technology (Pavlou & Fygenson, 2006) to the forefront of theoretical and practical attention.

In this study, we therefore investigate how travelers' Self Construal interacts with perceived controllability of a blockchain-enabled hotel booking app. The deployment of blockchain in tourism is often predicted to fundamentally disrupt inter- and intraorganizational processes and impact the way in which tourism and hospitality operators interact among themselves and with their customers (Irannezhad & Mahadevan, 2020; Tham & Sigala, 2020; Treiblmaier, 2020). Based on the Agentic Theory of Human Behavior, we propose that this assumed loss of control matters more to travelers with an independent (individualistic) rather than a interdependent (collectivist) self-construal. Specifically, we propose the following two hypotheses:

H1. Travelers with an interdependent self-construal are more likely to choose a hotel booking app using blockchain technology than travelers with an independent self-construal.
H2. This effect is more pronounced for a blockchain app offering low (rather than high) controllability.

We used Scenario Technique to manipulate the perceived controllability of a blockchain-enabled hotel booking app in two studies (n1 = 194; n2 = 475). Specifically, we tested for the interaction of controllability with individual-level measures self-construal. We conducted two studies using an experimental design with convenience sampling to test our hypotheses. Each study first introduced subjects to the basic concept of blockchain, including its distributed nature of data storage, data immutability, and data encryption. We then asked the respondents to imagine that they wanted to book a hotel in another country, followed by a detailed description of a new blockchain-enabled booking app. The respondents were then randomly assigned to either a scenario where the booking app provided just the mere booking functionality (i.e., low controllability) or a scenario where the app provider offered added services which increased users' options in determining the processes and outcomes (i.e., high controllability). Added services offering high controllability included options for easy cancelation or refund, call-center support, assistance with lost passwords, and access to customer reviews. As our dependent variable, subjects where then asked to indicate whether they would use the blockchainenabled app or a traditional OTA. In all scenarios, the blockchain-based app offered a discount over the OTA of between 7.5% (where the app offered services beyond the mere booking) and 10% (in the case where no additional services were offered by the app).

The findings confirm our hypotheses in that (a) travelers with an interdependent self-construal are more willing to use blockchain technology for their hotel bookings than travelers with an independent selfconstrual; and (b) this effect can be mitigated by offering added services that give travelers with an independent self an enhanced sense of control. In study 1 (n = 194), a logistic regression reveals a significant negative effect of independent self-construal (b=-1.339 (.605), Wald (1) = 4.889, p=.027), confirming H1. Respondents with an interdependent self-construal exhibit a significantly higher likelihood of using the blockchain-enabled booking app (48.6%) for the simulated booking than respondents with an independent self (18.8%, $\chi2$ (1)=8.977, exact p=.004). A significant positive interaction of selfconstrual with controllability (b=-1.560 (.793), Wald (1) = 3.877, p=.049) confirms H2. The difference is significant only in the scenario with low controllability, where 45.3% (5.3%) of the respondents with a interdependent (independent) self-construal selected the blockchain booking app ($\chi2$ (1)=9.883, p=.002). In the scenario with high controllability due to the added service options, no significant differences emerge between the two groups (51.8% versus 38.5%, %, $\chi2$ (1)=.754, p=.537).

In study 2 (n = 475), a triple split resulted in 166 respondents with a predominantly interdependent self and 164 respondents with a predominantly independent self, the remainder showing a balanced self. The results again corroborate both H1 and H2. For their hotel booking, 48.8% of travelers with an interdependent self, but only 27.4% of travelers with an independent self chose the blockchain app ($\chi2$ (1)=15.941, p<.001). This difference is more pronounced in the condition with low controllability (39.5% versus 8.3%, $\chi2$ (1)=20.197, p<.001), and less pronounced, but still significant, in the condition with high controllability (58.8% versus 42.4%, $\chi2$ (1)=4.580, p<.047).
This study is the first to investigate the interaction of self-construal with perceived controllability in tourism and hospitality. Furthermore, it is the first in the technology-acceptance literature to assess this interaction using individual-level measures of self-construal and an experimental manipulation of perceived controllability. Methodologically, our research is novel in that we use individual-level measures of self-construal from a multicultural sample residing in one country (Study 1) and from a sample of travelers born and raised in one and the same country (Study 2). In contrast to previous research on the interaction of culture and the perceived controllability of a modern technology, this allows us to isolate the effects of culture from potential confounds related to current residence and nationality, respectively. In summary, blockchain-enabled applications facilitating direct hotel bookings and offering few intermediary services are more readily accepted by travelers with an interdependent self-construal . Blockchain applications addressing travelers with an independent self-construal require added services establishing a sense of controllability.

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Ahmet Vatan: What do publications about robots in tourism clue in about sustainability?

Sustainability emerged with sustainable development in the 1970s, and nowaday it has spread to every field. Sustainability has also gained importance in tourism.

The importance of sustainable tourism is increasing with the depletion of limited resources day by day. One of the topics on the agenda of the tourism academy is robotization. Although robotization is thought to be common in industries producing goods, it can be seen from examples around the world that it has started to find a place in tourism as well. So, what do the publications about robotization in tourism tell us about sustainability? The aim of this study is to examine the relationship between sustainability and the findings of publications on robotization in tourism in the last 5 years.

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Evelina Gillard, Alessandro Cavelzani, and David Brannon: A Typology for Aligning Laissez-Faire Leadership Conceptualizations, Antecedents, and Outcomes

Research on leadership implicitly assumes that laissez-faire leadership is not related to employee perceptions of Human Resource Management, while offering conflicting views on its functionality. Present review aims to relax this assumption by examining this construct through behavioral and attributional lens. This paper contributes to the leadership literature by proposing a typology of laissez-faire leadership depending on employee perception of Human Resource process. It distinguishes deconstructive, conservative, reconstructive, and developmental laissez-faire leadership and argues the latter may be functional, particularly its dynamic form. We set out the agenda for future research and discuss practical implications of these findings for talent management in hospitality industry.

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David Brannon: Sustainable Careers among Hospitality Professionals, a fore or afterthought?

Much recent discussion has shifted towards promoting sustainable careers with greater attention for work life balance, purposeful employment and longer career spans. The emphasis though commonly rests on organisations facilitating such ambitions, yet the hospitality industry classically exemplifies short careers. Opportunities for growth can be slim with flattening hierarchies, centralised departments and performance orientated cultures. This invites consideration on what strategies hospitality employ when navigating their careers, crucially do they adopt a performance (short term) or sustainable (long term) approach?

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Roeland Kers and Jenny Sok: Team Resilience in the Hospitality Industry: A Case Study on how Covid impacted teams in the Netherlands Hotel Industry, bounced back together

Resilience research is well-established at the individual and organizational level, whereas team resilience is an upcoming topic in this field of research (Stoverink et al., 2020). Why? First, many organizations nowadays have a team-approach when it comes to dealing with complex tasks (Mathieu et al, 2017). Teams allow members to share workload, monitor the work behaviors of other members, and develop and contribute expertise on subtasks (Mathieu et al, 2000). Second, in our fast-changing business environment, where many disruptions take place, work teams often face adversity (King, Newman, & Luthans, 2015). Team adversity can be chronic (i.e., long-standing, cumulative) or acute (i.e., sudden, often with high-intensity). Both types of adversities can weigh heavily on team performance (Sims & Salas, 2007).

In general, team resilience is defined as 'a team's capacity to bounce back from adversity-induced process loss' (Stoverink et al., 2020). Until now, most studies on team resilience are performed in settings such as nursing, police, and IT. To our knowledge, team resilience has not been researched within a hospitality setting. One of the main challenges of today's hospitality industry is to operate in a fast-changing environment. All aspects of the industry, including strategy and marketing, are dealing with accelerated social and technological change as well as growing global interdependence (Bandura 2001). This is all the more of importance since the COVID crisis, which made it more difficult for teams to survive; to connect and keep working together and to start up again, when after lock-downs restrictions are eased.

Therefore, this study will focus on the question: "What was the impact of COVID on the team dynamics, and how did teams 'bounce back' from this severe adversity?"

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Angelique Lombarts and Neil Walsh: Encounters on the Silk Road: Towards a Genealogy of Hospitality

This article seeks to explore how contemporary productions of hospitality emerged along the Silk Road routes. The authors propose that a study of various traveller accounts of journeys undertaken on these iconic paths facilitates understanding of the genealogy of hospitality. The paper identifies how hospitality is constituted on the Silk road routes in moments that oscillate between a welcome embrace and a hostile rejection. In today's fraught global geopolitics understanding of the principles and practice of hospitality is more important than ever before. Indeed, the present hostilities among people, states, and religions calls for a further examination of the origins of the concept. Inspired by Derrida's (2002) view that the hostile is a central configuration of hospitality, the authors proceed to explore an evolution of hospitality and in doing so capture practices, manifestations and experiences that constitute its emergence.
The authors start with the premise that the study of hospitality is a contested terrain. It is at once an assumed universal principle, a situated endeavour, a commercialised practice and a human characteristic. For much of human history hospitality has been (and is) a prominent feature of social and virtuous life; hospitality is part of the customary treatment of strangers.

Various authors have studied the phenomena of hospitality in theological (Pohl, 2002, 2011; Siddiqui, 2015, 2016, 2017), philosophical (Derrida, 2000; Derrida & Dufourmantelle, 2000; Levinas, 1989; Telfer, 1995, 2017), and social contexts (Lashley, 2017; Lashley & Morrison, 2000; Lynch et al., 2011), an emergent school of thought within hospitality is now collectively known as Critical Hospitality Studies; that is, studies 'of' hospitality. Another trajectory of hospitality in the literature is that which tends to hospitality as an industry and management practice, this includes studies 'for' hospitality that pertain to commercial aspects, as several literature reviews illustrate (Garcí a-Lillo, Ú beda-Garcí a, & Marco-Lajara, 2016; Li, Ma, & Qu, 2017; Myung, 2018). Genealogy traces the evolution of 'being'. For Nietzsche (1994), genealogy refers to the study of the genesis of concepts. Similarly, Foucault (1975) posits genealogy as research into the origin and emergence of things. In other words, how a contemporary phenomenon developed (Kritzman, 1988: 262). Importantly, the anti-genealogy manifest in the rhizome (Deleuze and Guattari) heralds relationality and the entanglement of the genesis of thought rather than a genealogy that originates from any one point.

The aim of the paper is to explore how hospitality is constituted in the encounters on the Silk Road, as expressed in written accounts of those who travelled the routes. To trace the genesis of hospitality travel diaries (and other documents) are viewed as the discursive matter through which representations of hospitality are manifest, distributed and reproduced. Recently, tourism scholars have advanced the status of guidebooks and travel diaries as insightful tools and instruments for understanding (traveller) behaviour (Edensor, 2016). Unlike the tourism academe (Bento, 2020; Nair, 2017; Noy, 2004) hospitality studies have scarcely activated diaries as a means for searching for meanings in hospitality settings. In this paper the travel diaries of those that travelled Silk Road routes can be conceived as embroiled in the wider formation of a hospitality genealogy. By exploring written accounts of those who travelled on the Silk Road routes the authors believe it is possible to realize the genesis of contemporary practices of hospitality. Employing a rhizo-textual method, fourteen documents are analysed: travel logs, diaries and letters. The authors of the diaries are either the travellers themselves or the narrators of the travels. Lynch's (2017) conceptualisation of 'hospitality life politics', underscores the logos for the themes that the authors examine within the rubric of hospitality and hostility, the themes are: relationship, exchange, reciprocity and trust.

Upon coding and analysis, the findings are subsequently categorised into four constitutive elements of hospitality-making on the Silk Road; material, emotional, ideological and behavioural instances of hospitality and hostility-making. The material is displayed through artefacts, materials and various goods; the emotional comes to the fore in emotions expressed and affects shown. The ideological is interpreted via ethical, political and/or religious acts. Finally culture and social interaction are revealed in behaviour. These instances co-produce hospitality; that is, any one invokes the other. Or differently put, these constitutive elements are intrinsically entangled and 'rhizomatic'. Of each of the constitutive elements, an example clarifies the expression of hospitality (or hostility). First, references to drink and food, often a gesture of welcome and a way of treating travellers. Second, several diaries expose the feelings of fear evoked by the anger and aggression with which foreigners are received. The ideological aspect is evident, for example, in the stories about Hindu Brahmins. And the fourth, a cultural aspect in Marco Polo's accounts is the mention of the cannibalization of condemned prisoners.

Viewing hospitality making as rhizomatic enables insights into how hospitalities today are continually formed by the intersection of material, emotional, ideological, and behavioural domains. In any one hospitality encounter all four domains are at work, for example in the hospitalities of geopolitical crises such as the (un)welcome of the migrant (f.i. Syrian refugees in the European Union); or in Life Politics (in the welcome or the non-welcome of the Other) that lays hospitality's most aggrecios acts of violence or most sincere acts of hope.
This paper serves to open up the possibilities of further research that will explore

the genealogy of hospitality. The wealth of rhizomes and the numerous possibilities of disentanglements offer a multitude of further research opportunities. This paper contributes to, and opens up, means to unpack hope and hospitality in critical and reflective ways.

Panel discussion 10 June 09:00-10:00

Bastienne Bernasco, Evelina Gillard, Lynda Pasmore, Giuseppina Menconi and Francesco Versari: To Save the Planet, Have A Tiramisu: Contribution of the Mediterranean Food Culture to Workplace Well-Being. Food Expert Talk with THE-ICE "Sustainable Food System" community

Topic of the panel discussion: Food Expert Talk "To Save the Planet, Have A Tiramisu: Contribution of the Mediterranean Food Culture to Workplace Well - Being"

Description of the topic: Food Expert Team of Cesar Ritz Colleges inaugurates the video Food Expert Talks at the THE-ICE community of practice "'Sustainable Food Systems". Food Expert Talk is a translational research project led by Cesar Ritz Colleges Switzerland. The aim of video-recorded expert talks is to translate academic knowledge based on published research into practical recommendations. These talks would typically include a career researcher holing a PhD presenting the theory, a lecturer connecting theory to practice, and a practitioner suggesting a "road map" for enhancing sustainability through food.