

Exploring collaborative workplace models from accelerators to incubators: Key considerations and findings for tourism innovation

Vincent Michael Bruin – 20181186 – vbriu18@student.aau.dk

M.A. TOURISM (GLOBAL TOURISM DEVELOPMENT) | AALBORG UNIVERSITY COPENHAGEN

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Abstract

This study analyses a restructuring of forms of collaboration by tourism-related startups and emerging players with both internal and external partners. The analysis takes place in Denmark a country recognised as a European leader in innovation. The strong entrepreneurial motivations behind the establishment of innovation hubs as places of co-locating collaboration is well established, however, this study addresses a requirement for deeper understanding of tourism-related innovation hubs incorporating co-working models similar to those found in industries such as financial technology, health and sports innovation. This is contextualised through a focus on internal design-considerations benefiting users, rather than a wider destination development approach. By employing an exploratory sequential design mixed-methodological approach, this study probes the benefits of such an organisation structure. The first stage of the mixed-methodological approach involves eight (n=8) in-depth qualitative telephone and videocall interviews. These interviews explore innovation hub founders' motivations and perceived benefits to establishing co-working models and/or innovation hubs. A textual analysis is employed to identify common themes from the interview data, which are coded using a computer text coding software (MAXQDA). A further online survey (n=19) targeting entrepreneurs is carried out to investigate key codes identified in the first stage of the sequential process.

The analysis includes two case studies on the TourismX accelerator programme (Denmark), and the Welcome City Lab (France) labelled as the world's first incubator for the tourism sector. These case studies act as a preliminary exercise into exploring such innovative organisational structures in tourism. This study identifies that many startups and emerging players desire greater levels of collaboration with both external partners as well as established players, while it is argued that many established players have not yet realise the potential of such collaboration. Internal competition among startups is also an identifiable concern for many startups.

The study concludes with a call for the opportunity present in prevailing challenges to be realised. Nine actionable recommendations are made to startups to foster greater levels of internal collaboration in a co-working model of workplace design. Further, recommendations are given on how to incorporate problem-based approaches in innovation hub design.

Key words: innovation hubs; co-working spaces; accelerators; traveltech; problem-based design; interdisciplinary collaboration; Social Innovation Communities.

Author's note

I would like to acknowledge the following people in their assistance of me, my brave Oma, wise parents, beautiful brothers, loving partner, dearly missed family members and banterful friends near and far. I would also like to acknowledge my colleagues and fellow candidates at Aalborg University Copenhagen for their input. My most gratuitous thanks are also extended to all those who informed this project, without whom this study would not have been possible: I remain eternally grateful. My final thanks go to my mentors U.G., L.Z. and B.M. for always showing great belief in me.

This study is dedicated to the Blue Mountains.

"Remember, kids: Knowledge is Power"

Vincent Michael Bruin

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1 Introduction

What are the biggest challenges facing society? “*Climate change and Trump*” answers one respondent. The four words on the computer screen projecting a cold reminder that only collective action and *resistance* will reduce the harmful effects. Donald J. Trump cannot remain US President past 2024, even then he might not go quietly. Climate change on the other hand is not restricted by term limits. It is *the* limit. Climate change is a real challenge. By reimagining organisational circles and fostering renewed collaboration with our (old-)allies, tourism too, could be inspired by industries, which sprout catchy neologisms such as ‘fintech’, ‘urbantech’, and ‘sports lab’ in designing innovation hubs which promote collaboration and co-locality.

1.1 Context of this study

Every piece of research that wishes to have itself taken seriously ought to contribute fresh knowledge to the scholarly landscape. Despite the initial shadows caused by the COVID-19 pandemic in 2020, there is always reason to remain optimistic for the future of tourism. The period has presented some with a chance for contemplation and an opportunity to (re-)consider future alliances and cooperation. But there is not only time for contemplation, as Gössling, Scott, & Hall argue there is a responsibility for tourism to reconsider its role as a “vector and victim in the occurrence of pandemics” such as COVID-19 (2020, p. 13) The early sparks of this study were struck prior to the pandemic being declared by the WHO, because Denmark, specifically its capital Copenhagen represents an exciting opportunity to consider what an innovation hub for tourism-related businesses could look like. The Danish capital is already home to some hubs around specific industries or centred themes such as the Copenhagen Fintech Lab, Danish Institute for Sustainable Innovation & Entrepreneurship, and the Copenhagen Health Tech Hub, however few have been the centre of academic focus on the added-value created by such forms of cooperation in tourism. The aim of this study is to contribute knowledge, which while drawing the focal points of its data from Copenhagen in a limited process, may contain lessons for a much wider audience outside of academia. These pieces of guidance may be enriching for groups such as hub managers, Destination Management Organisations (DMOs), entrepreneurs, and startup founders as all adapt to a new future of tourism where opportunities present themselves to rethink day-to-day work structures.

1.2 Problem statement

In terms of geographical size and population Denmark does not rank in the pointy end among the European Union's member states. However, the Nordic country does punch above its weight as one of four "Innovation Leaders" alongside Sweden, Finland and the Netherlands by the European Commission (2019, p. 13). Denmark has a large concentration of its population, tertiary education providers, and heavy infrastructure in its eastern capital. While a lot of the discourse around tourism development occurs

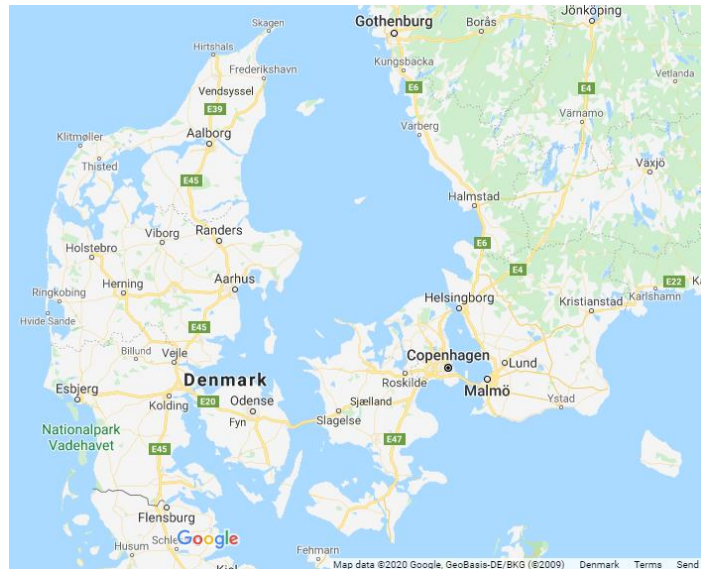


Image 1: Source - Google Maps, 2020

through the DMO Wonderful Copenhagen, currently there is no permanent physical location for players who identify in the industry to conjugate. This could be identified as a problem for startups and emerging small to medium sized enterprises (SMEs) who may be seeking to bring their solutions to a larger audience. Previous attempts to generate knowledge and expertise in this area was the TourismX project, a national accelerator programme led by a partnership between Wonderful Copenhagen and Dansk Kyst- og Naturturisme¹ (TourismX, n.d.; VisitDenmark, 2020).

1.3 Research question

This study centres itself around the following research question:

"How could the formation of an innovation hub with a focus on tourism, enhance already existing alliances and create new opportunities for value-creation?"

This question can be broken into four core aims, which this study will answer in its duration:

1. *To explore the literature and assess the current field of play around innovation hub creation with a particular regard for startups and emerging players focused on tourism, travel or the experience economy;*
2. *To critically analyse challenges other innovation hub founders have encountered, and the tools and resources required to overcome them;*
3. *To identify modes of stakeholder support for such a project;*
4. *To make grounded recommendations for the development of such a place which takes the future of tourism into consideration by achieving more than solve industry-based problems.*

¹ Danish Coastal and Nature Tourism

1.4 Key significance of this study

This study represents a significant new opening in tourism research. In comparison to other industries tourism, especially in Copenhagen has not yet embraced a model where startups conjugate in a shared venue on a day-to-day basis where they not only lift challenges together but also engage with established players on a more even playing field where all benefit from the interaction. This study presents a potential large piece of growth into an undeveloped area of tourism research.

2 Key terms

This chapter will use academic literature to delineate differences across important terms that will form key arguments and discussions through this study. This result of this will be understandable working terms.

2.1 What are innovation hubs?

In a city marketed as a cycling paradise it would seem apt to take the definition of hub as “the central part of a wheel” (Oxford University Press, 2020), however, in a concrete sense Gathege & Moraa (2013 in (Jiménez & Zheng, 2018, p. 95)) define an *innovation hub* as “... a space where technologists, computer scientists, hackers, web developers and programmers congregate to network, share programs and design to bring their ideas to fruition.”. Notably though an innovation is not limited to only the professionals listed above. An innovation hub is by philosophy a delimited space. This paper argues that the similar term *lab* is and can be used interchangeably. Indeed, while lab is a shortening of laboratory in, the proposed use of hubs as social places of collaboration makes this a fitting comparison.

2.2 What are incubators, incubation process?

Incubators are defined as a construction that plays a key role in providing the requisite conditions for an environment of innovation to be conducted by early stage startups (Westley et al.; 2006; McKeown, 2008 in (Nicolopoulou, Karataş, Vas, & Nouman, 2017, pp. 371-372)). Furthermore, incubators have also been described as an occupied space which “... enhances the ability of its tenants to survive and grow in business.” (McAdam, Galbraith, McAdam, & Humphreys, 2006, p. 451). Incubators are “hybrid organizations”, which have a particular role in “... to support the start-ups progress.” (Etzkowitz, Carvalho de Mello, & Almeida, 2005, p. 34). The incubation process concerns the incubator participants’ “collaboration and learning” (Nicolopoulou, Karataş, Vas, & Nouman, 2017, p. 369). A typology of business incubators is provided by Aernoudt (2004, p. 128), differentiating between Mixed Incubators, Economic Development Incubators, Technology Incubators, Social Incubators, Basic Research Incubators (See appendix 9.1).

2.3 What are accelerators?

Pauwels, Clarysse, Wright, & Van Hove describe accelerators as programmes designed with the goal “... to accelerate successful venture creation by providing specific incubation services, focussed on education and mentoring, during an intensive program of limited duration.” (2016, p. 13). The following five key defining attributes of an accelerator are outlined by Miller & Bound: A) a competitive open-call application process; B) an investment tied to terms; C) a focus on small teams usually of 2-4 people; D) a time-limited rapid innovation process with ongoing mentorship; and E) teams are ‘accelerated’ in groups or intakes with others, physical events and meetings is essential (2011, pp. 9-10).

2.4 What are co-working spaces?

For the purposes of this study co-working spaces² are limited to formalised services with deliberate effort has been made to design “... shared offices where a group of individuals with more or less heterogeneous backgrounds co-locate themselves in the same work environment.” (Kojo & Nenonen, 2016, p. 303). This service is paid for by the user (Spinuzzi, 2012, p. 400), thus co-working space providers are driven to heighten their competitive edge by providing more than just desks, such as “... emphasising activities and offer[ing] tools” (Kojo & Nenonen, 2016) to enhance inter-collaboration between their users (Parrino, 2015, p. 265). Orel & Dvouletý provide a narrative review of the developments of the model of “coworking” (2020). Early grassroots movements to found co-working spaces include the “jelly” model, this model focuses on coming together in co-locality by an informal host to share common services (Putra & Agirachman, 2016; Orel & Dvouletý, 2020). The behaviour behind these spaces is a rapidly expanding phenomenon encompassing primarily independent innovative workers, small-businesses and freelances found principally in urban environments (Brown, 2017, p. 113).

Finally, an accelerator or incubator may exist within a co-working space, within a much larger innovation hub, however they are different, moreover the terms are distinguishable and not interchangeable. It is important to consider the social collaborative aspect of all concepts.

3 Literature Review

Due restrictions of public mobility and health risks, only literature that was available electronically was reviewed. Fagerberg, Fosaas, & Sapprasert (2012) provide an in-depth guide to key contributions in the field of innovation studies which includes many printed publications. This

² Some literature employs the term without a hyphen i.e. ‘coworking’. For consistency purposes this study uses the term ‘co-working’. Some researchers strongly encourage the former’s use and describe the latter’s use as “incorrect” (Orel & Dvouletý, 2020, p. 15).

chapter will review literature across five themes: open innovation in tourism; innovation hubs in Denmark; innovation hubs in tourism; traveltech & tourismtech neologisms; and social innovation community theory.

3.1 Open innovation in tourism

Before delving into the literature around ‘open innovation’ in tourism it is worthy to mention the origins of the now- ubiquitous term. The origins of the term ‘open innovation’ is commonly attributed to Henry Chesbrough. Chesbrough’s initial writings (2003a; 2003b; 2003c) argued businesses need to rethink their initial methods of innovation to more open and collaborative systems within the context of intellectual property considerations. The following year Chesbrough offered a model of how to businesses could loosely manage this unfamiliar innovation model with the now popularised “chess vs. poker” analogy which acknowledge flexibility in business strategy and the openness of the field (Chesbrough, 2004). Further literature on open innovation references Chesbrough’s pioneering work. Now literature around open innovation in tourism will be brought into focus. Some early bridges were Larson (2009) who touched upon the collaboration agreements utilised by forms of festival design, and Baglieri & Consoli (2009) who considered collaborative innovation in virtual spaces. Examples of specifically open innovation and tourism being discussed together was in examples of the improvement of a (tourism) services rather than simply “product innovation” (Aas, 2012) or manufacturing (Tudjarov & Anisic, 2011; Foroughi, Buang, Senik, Hajmirsadeghi, & Bagheri, 2015; Thomson, Kilgore, & Ni Lionnàin, 2015; Iglesias-Sánchez, Jambrino-Maldonado, & de las Heras-Pedrosa, 2019). More contemporary pieces of literature explore have explored open innovation from the perspective of the various tourism stakeholders and often commenting on the context of the DMO’s role (Lalicic, 2018; Lalicic & Dickinger, 2019; Kazandzhieva, 2019). Others have referenced tourists’ role in the innovation process citing them in co-created design (Binkhorst & Den Dekker, 2009; Sfandla & Björk, 2013).

While not addressing tourism in name, Maček et al.’s (2019) article links what it calls “smart cities” with a future of urbantech³ to improve cities’ liveability through open innovation practices.

3.2 Innovation hubs in Denmark

Innovation hubs are prevalent across the globe including examples in the Arctic (Hintsala, Niemelä, & Tervonen, 2017), Ethiopia (Desta, 2018), and Colombia (Contreras, Pineda, & Egade, 2013).

However, while even the Danish government has maintained a consulate general in Silicon Valley since 2017 (Udenrigsministeriet, n.d.; Udenrigsministeriet, 201x; Nordic Innovation House, 2014), little academic research has been published on innovation hubs in Danish contexts, aside from an

³ Urban technology

obscure joint publication from the Ministry of Taxation (Carstensen & Bason, 2012). It details the success of the MindLab a government lab founded in 2002, which permanently closed its doors in 2018⁴. Pulling back sharply on the lens Asheim & Coenen (2005) come close to the mark in their comparison of multiple Nordic “clusters” across five regions and industries, while further contributions have proposed that international clustering is a possibility in the Oresund region (Park, 2014). Badiola-Sánchez & Coto-Millán (2013) cite Denmark among other European countries’ examples, however their study’s data was almost a decade old upon publication and the Danish sample size is far too small to remain any meaningful representation. Maskell’s working paper (1996) provided socio-cultural commentary on the Danish example and regional clusters could be facilitated in the small but developed European nation.

3.3 Innovation hubs in tourism

Here the review refocuses to highlight literature encompassing innovation hubs in tourism. While some researchers have taken an approach to innovation in tourism through destination governance (Halkier, 2014; Hall & Williams, 2008), little is mentioned on organisational structuring of startups into places of co-working innovation hubs. Examples of tourism’s blended role in innovation hubs include Auckland (O’Reily, 2014) or Florianópolis (Yigitcanlar, et al., 2018). However disappointingly little exists on key industry examples, in scholarly works, such as Welcome City Lab in Paris besides odd periodical mentions (Canada Newswire, 2017; Flight Airline Business, 2017) not to mention a piece⁵ from the Lab’s own founding father heralding the visibility of startups in the tourism sector (Queige, 2015). The Welcome City Lab is mentioned in name as a pioneering example of the “entrepreneurship dimension” to develop new businesses using incubators and accelerators (Bellini, Grillo, Lazzeri, & Pasquinelli, 2017), however no critical commentary given. Putra & Agirachman’s conference paper (2016) among others have concerned “design strategy and community building programs” with reference to the field of creative tourism, however their focus is on designing co-working spaces with digital nomads in mind, rather than more sedentary entrepreneurs active in tourism.

3.4 Traveltech & tourismtech

As mentioned during this study’s introduction, a key point of departure was to investigate the prevalence of the neologism ‘traveltech’⁶. In this section of the review the scope looks to uncover such literature as well as allowing an expansion of the lens to include ‘tourismtech’. Even expanding for “tourism tech” or “travel tech”, the two neologisms are virtually invisible in academic journals.

⁴ “How Denmark lost its MindLab: the inside story” (apolitical, 2018)

⁵ In French with English and German abstracts.

⁶ Travel technology.

Again, the use of the neologisms is a tool itself to find innovation hubs providing spaces and solutions to tourism businesses. Therefore, Hjalager's collation of transformative technologies in tourism is, while a valid list, only a list of isolated technologies developed over the last 600 or so years (Hjalager, 2015). There are other examples of articles, which have highlighted the uses of a certain piece of technology's application in tourism and another field such as medical science (Altinay, Dagli, Altinay, & Altinay, 2019) or a prevalent pre-existing tool such as the mobile phone being applied in tourism contexts (Law, Chan, & Wang, 2018). However, no example explicitly mentions the neologism, which represents a trend in Information and Communications Technology (ICT) to create a catchy term for one's sector or field of focus.

3.5 Social Innovation Community theory

This study applies Social Innovation Community (SIC) theory (Toivonen, 2016) as an analytical tool. It is necessary to unpack the motivations and explain the opportunities for such an organisational form to create value for tourism-related startups.

According to Toivonen, SICs "... should not be conflated with any particular kind of physical infrastructure despite the prominence of the above-mentioned [...] permanent physical centres." (2016, p. 52). That is to say, such communities are first and foremost social organisational forms not guaranteed by physicality. Others have considered online SIC (OSIC) as another means to solving societal issues (Lee, Cheon, Han, & Kwak, 2018). The rise of workplaces founded on this theory indicates suggests "that the underlying model(s) are transferable and adaptable to diverse contexts, and that they thus have broad global relevance." (Toivonen, 2016, p. 51).

3.6 Summary of Literature Review

During this chapter, the origins of 'open innovation' have been reviewed. The concept was born out of computer and information technological companies' need to rethink their forms of innovation. However, for the purposes of this study, the concept of open innovation also takes on new relevance. That is to say, that when the concept is applied in the context of a co-working space such as a hub or incubator where information and experiences are regularly shared, greater value is created by participants. This paper will contribute literature to the understanding on the state of innovation hubs in Denmark an area that has been identified as under researched. On the one hand regional clustering has been touched upon in many pieces of literature over the years, including the shift towards a focus on innovation in tourism service sector and innovation as a policy instrument of forms of destination governance. While on the other hand this review has also highlighted the need for a greater level of attention to be paid to how a physical shared location could function and add to the dialogue around innovation in tourism free from themes of destination development not only in Denmark but also in the Nordics in this much under studied field of research.

4 Methodology

This chapter will outline the methodology approach undertaken during this study. This will include a detailed description of the steps and considerations taken to justify and contextualise the data that shall then be analysed in chapter 5. The main modes of data collected were recorded in-depth qualitative interviews, supported by written field notes, and online surveying, as well as desk research.

4.1 Notes on fieldwork during the COVID-19 pandemic

The figurative cloud that is the COVID-19 pandemic and its omnipresence cannot go unmentioned. While the author in no way intends to use it as an excuse for any shortcomings or challenges faced as part of this project, it is necessary to mention its existence in order to understand the context and parameters of this study. Even the unique nature of the pandemic has already been highlighted as having the potential to make some fields of research especially sensitive during such a distressing period (Townsend, Nielsen, Allister, & Cassidy, 2020, pp. 381-382).

4.2 Research paradigm

The identified gaps in literature around innovation hubs in tourism requires an initial open line of enquiry. This line of enquiry's aim is constructivist as it seeks to develop a greater wealth of understanding (Guba & Lincoln, 1994, p. 112). This thirst for understanding and new knowledge, can be described in Schwandt's words when stating that according to constructivist theory "[k]nowledge and truth are created, not discovered by mind." (1998, p. 236). That is to say that, objectivist or structuralist paradigms are too limiting as initial investigative tools due to the limited amount of knowledge on offer. Through academic rigour and the power of convincing argument equal realities are acknowledged as something of the mind (Hansen, 2004 in (Ponterotto, 2005, p. 129)). Certainly, the constructivist paradigm is in opposition to more a classical paradigm of establishing strict dichotomies.

Nevertheless, Ponterotte also identified that there is a danger of "unknowingly "postpositivizing" constructivist qualitative methods, which is akin to forcing a round peg into a square hole." (2005, p. 127). One danger as pointed out by Ponterotto (ibid.) is "the establishment of theme categories before the study and the attempt to code interview data into these categories". For this reason, coding was done only after all data had been collected. Further reading on the coding process can be found in section 4.4.7.

4.3 Mixed-methodological approach

That is not to say that postpositivist theory cannot play an important role in this study. Its role will be explained in the ensuing discussion on the mixed-methodology approach. Crotty (1998 in

(Creswell & Plano Clark, 2013, p. 40)) suggests four key “worldviews” or paradigms, which inform mixed-methodological research well. These four paradigms are: postpositivism, constructivism, participatory, and pragmatism.

Postpositivist Worldview	Constructivist World View	Participatory Worldview	Pragmatist Worldview
Determination	Understanding	Political	Consequences of actions
Reductionism	Multiple participant meanings	Empowerment and issue orientation	Problem centred
Empirical observation and measurement	Social and historical construction	Collaborative	Pluralistic
Theory verification	Theory generation	Change orientated	Real-world practice orientated

Table 1: Source: Author. Modified from table 2.4 (Creswell & Plano Clark, 2013, p. 40)

The discussion around the research paradigm moves from the theoretical consideration to a discussion around the importance of implementing a mixed-methodology approach blending worldviews. As has already been mentioned, an initial open line of enquiry is important to such a new field of research, therefore an exploratory sequential designed approach shall be used in order to not only gather a wider range of perspective before then adding greater depth of knowledge to particular areas identified as needing greater exploration (Creswell & Plano Clark, 2013, p. 87). Here the execution of timing plays an important role. The second step of this design takes place only after the first step has been concluded.

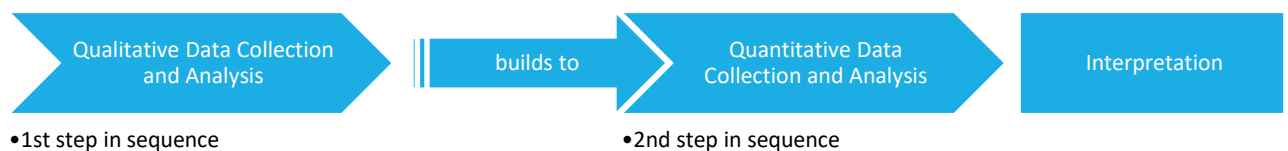


Figure 1: Source: Author. Referencing figure 3.2 in (Creswell & Plano Clark, 2013, p. 69)

4.4 Qualitative interviews

In the following sections accounts of the reasoning behind the use of qualitative interviews will be given. It will demonstrate the effectiveness and challenges of such a methodology approach as a tool of information gathering during the COVID-19 pandemic.

4.4.1 Data collection

An initial list of potential interviewees was drawn up in late February 2020. This process was done using an iterative approach and focused on potential interviewees who the author was aware of and who met one or both of the following criteria:

- Criterion A): “Has the individual founded or directed an innovation hub or incubator?”
- AND/OR

- Criterion B): “Does the individual possibly have pertinent and/or informative insights to share on the development of a hub?”
- AND/OR
- Criterion C) “Does the individual possibly have pertinent and information insights relevant to a tourism or travel related innovation hub?”.

The first of eight interviews took place in March 2020 right as the Danish national government closed down the country and with it the planned in-person interview was scuttled for an online interview. There was an ongoing and concurrent process of identification of interviewee participants, the conduction of interviews and their transcription.

In Table 2 key information on each interview can be seen.

<i>Interviewee Description</i>	<i>No.</i>	<i>Platform</i>	<i>Criteria</i>	<i>Week⁷</i>	<i>Key Qs⁸ prepared</i>	<i>Key Themes</i>	<i>Duration</i>	<i>Appendix</i>
Founder of hub	1	Skype w/ video	A, B	11	6	Hub foundation; benefits; verticals; design philosophies for innovation	32min	9.13
Former hub manager	2	Telephone	A, B	12	6	Hub foundation; benefits; verticals; design philosophies for innovation	46min	9.14
Project manager at consultation agency	3	Google hangouts half video	B	13	6	Hub foundation; interdisciplinary collaboration; verticals	31min	9.15
Co-Founder of startup	4	Skype w half-video	B, C	13	7	Early stage startup challenges; tourism ecosystem	40min	9.16
Founder of innovation hub	5	Google hangouts w/ video	A, B	13	6	Hub foundation; benefits; locality	43min	9.17
CEO of tourism consultancy group	6	Google hangouts w/ video	B, C	14	6	Tourism ecosystem, locality, tourism challenges	36min	9.18
Founder overseas-based travel hub	7	Skype w/video	A, B, C	15	6	Hub foundation, international collaboration, local tourism ecosystem	n/a ⁹	9.19
Senior Manager at DMO	8	Google hangouts w/ video	A, B, C	16	4	Traveltech, tourism ecosystem	52min	9.20

Table 2: Key information on each interview.

Extended qualitative interviews require a considerable amount of time to transcript accurately, which was the author’s desire. Both the type of interviews and the number of interviews (eight in total) offer a large base of conversational data from which to commence a data analysis, which will be discussed in further detail in section 4.4.7. During the development of a qualitative research project with extended in-depth interviews, the question of sample size naturally appears. This has been described as the “how many?” question (Dworkin, 2012, p. 1320). There does not appear to be a precise number; as Dworkin states a large body of work has attempted to answer this question,

⁷ Weeks of 2020 during which each interview was conducted.

⁸ “Key Questions prepared”.

⁹ Interviewee 7 did not explicitly agree to audio recording in pre-interview ethics clearance. Notes were taken during and after the interview and then typed into an electronic document.

however the suggestion of “anywhere from 5 to 50 participants as adequate” (2012, p. 1319) still leaves the door open for interpretation. Indeed, this academic discussion can even be traced back to early proponents of grounded theory Glaser & Strauss in more contemporary literature (Johnson & Rowlands, 2012, p. 10), where they discuss the “saturation point”, i.e. the stage where “no new information altered the results already obtained” as outlined by Alameddine et. al. (2011, p. 5). Nevertheless, as stated earlier, eight extended interviews *were* indeed conducted and this was a satisfactory number as deemed by the author, not only for reasons of theoretical saturation, but also for reasons of time and access to knowledgeable participants.

4.4.2 Selection of interviewees

A process of iterative sampling was conducted to identify and select interviewees. The author identified an initial five key persons of interest and made an approach via LinkedIn or email. Three were available for an interview, while the other two politely declined due to issues related to the COVID-19 pandemic. These three initial interviewees had a distance factor of 1 from the author (point 0). Often in the case of a potential interviewee declining an interview they would however refer a more suitable contact or colleague to the author. In the end, two of the final interviewees had a distance factor of 5 from the author. All interviewees met criterion B¹⁰ outlined in section 4.4.1, thus satisfying Holtzblatt et al.’s (2005, p. 65) advice on selecting interviewees based on “...who [they] are and what they do...”. The process to identify suitable interviewees was open and used LinkedIn as a medium to expand out of the author’s immediate professional and social network. In Appendix 9.1 a screenshot of the author’s LinkedIn post from early March 2020 asking for interview participants can be seen. This method placed the author squarely in the research a discussion point to be discussed further in section 4.5.4 on positionality.

4.4.3 Development of interview guides

As part of the development of an interview guide, it is important to create a pool of potential questions before each interview. According to McCracken (1988 in (Martin, 2010, p. 376) it is recommended to “loosely [structure] questions and probing follow-up questions” before an extended interview. Certainly, particular factors informed the consideration process around the creation of these questions. An important starting point was the desired means of transcription. The time it takes to transcribe each interview was considered as this is a factor highlighted by Kvale (2011, p. 94) when it is expressed that “experienced secretary took about 5 hours to type verbatim a 1-hour interview”. Taking this moderate estimate that for every 1 hour of audio at least 5 hours of

¹⁰ “Does the individual possibly have pertinent and informative insights to share on the development of a hub?”

transcription would be required, it was decided to target the lower range of time for extended interviews at 30 to 45 minutes each.

With the time consideration in mind, between four and seven core questions were drafted in anticipation of each interview. Preparations also included studying an interviewee's professional background. DiCiccio-Bloom & Crabtree (2006, p. 316) state that "between 5 and 10 more specific questions are usually developed to delve more deeply into different aspects of the research issue.". These questions were open-ended questions with the aim to have the interviewees speak from their own experiences, without making any one question too specific thus becoming askable of one interviewee only. The questions were designed in a manner to allow for follow-up questioning to be asked, if an answer was not clear etc..

While the creation and inspiration from a similar question bank could be critiqued as postpositivist as outlined in the earlier example "...and standard from participant to participant..." (Ponterotto, 2005, p. 127), in this case, there was enough variance i.e. choosing the right time to ask a question and reworking the actual question to tailor to the individual interviewee in order to mitigate this risk of postpositivism.

The questions in point can be viewed under appendix 9.3. Notably, due to the fact that interviewee no. 4, was identified as a 'co-founder of a startup', rather than someone who had founded a hub or incubator, they received slightly different questions viewable under appendix 9.4. The interview with interviewee no. 6, described as a 'CEO of a tourism consultancy group' with a professional history at a DMO, built upon the previous insights from the earlier interviews and drew questions from appendix 9.5. Lastly, interviewee 8, described as a 'Senior Manager at a DMO', had questions specific to some tourism innovation projects in Denmark drafted in anticipation of their respective interview (see appendix 9.6).

4.4.4 Initial contact and setting up the interviews

As mentioned earlier, each interviewee was approached via LinkedIn's private messaging function or email. The author identified himself as a M.A. Tourism candidate at Aalborg University Copenhagen, outlined his thesis and asked the potential interviewee if they would agree to an interview while outlining some time and format details. An example of an email sent can be viewed under appendix 9.7. The interviewees were not given a copy of the questions before or during the interview. Only one (Interviewee no. 5) requested a copy or a greater level of understanding of the line of questioning they could expect to answer, a thematic outline was supplied for this request. From there an amicable time and platform was agreed upon with each interviewee. Permission was also sought for an audio recording to be made, and ethical questions were addressed.

4.4.5 Interview procedure

Each interview was conducted in a similar manner. They all followed a similar chronological six step format as outlined in Table 3.

Immediately pre-interview	<ul style="list-style-type: none"> • Check technology (ie. audiorecorder and computer is charged or charging) • Check note paper & pens. Note pages with Interviewee's name and date. • Place drafted questions on paper next to computer.
Commence Call	<ul style="list-style-type: none"> • Take or make call via the agreed medium. • Test video/audio connections with interviewee eg. "Can you hear/see me? I can not see you?" • Attempt to resolve any technical issues at this stage. • Exchange greetings, introduce self again, make chit-chat.
Commence formal interview component	<ul style="list-style-type: none"> • Shift register and signal formal part of interview e.g. "Now the reason I wanted to speak with you is..." or "Shall we get into the questions I have prepared?" • Reconfirm ethical component around audio recording and that the interviewee understands their response would inform thesis to appear on https://projekter.aau.dk/projekter/ • Tell interviewee when audio recording is started. • Start audio recording
Interview continued.	<ul style="list-style-type: none"> • Ask relatable first question so that interviewee can relax into talking • Check audio recording is still running properly • Continue with core questions • Ask any relevant following up questions
Ending the interview	<ul style="list-style-type: none"> • Monitor the time • Check with interviewee if okay to continue or exceed time. • Signal penultimate or last question • Ask if interviewee has any questions or if they would like to tell anything else. • Tell interviewee that the audio recording will be stopped • Stop audio recording • Close out interview • Agree on a timeframe for the transcript to be sent to interviewee
Post-interview	<ul style="list-style-type: none"> • Immediately send audio recording to transcription software • Curate notes • Add any afterthoughts • Mark any pages not marked with interviewee's name and date.

Table 3: Interview procedure. Source: Author.

4.4.6 Comments on tele- and video calling

As mentioned earlier in section 4.1, the COVID-19 situation made in-person interviews on the one hand practically impossible and on the more extreme other hand legally forbidden. Importantly, Herzog & Rodgers call upon their contemporaries when pointing out that surveys conducted over the phone can yield similar results to identical research practice conducted face-to-face (1988, p. 85). However, very quickly interviewees and the author seemed to have embraced calling regularly, in particular video-calling to facilitate day-to-day communication in-lieu of the restrictions on in-person meetings. It could be suggested that over a quarter of a century ago the rise of "video telephony" was inevitable as a form of social communication (Kraut & Fish, 1995, p. 708). Returning to contemporary times, this behaviour reflects some wider held attitudes to video-calling services such as Zoom and Google Hangouts during the initial stages of the COVID-19 pandemic breaking in the USA and Western Europe (CNBC, 2020; ZDNet, 2020). The rapid rise of Zoom during the pandemic even spurred internet jokes (HITC, 2020). Certainly in comparison to in-person face-to-face interviews, the telephone and videocall conversations did reach the same "gold standard" described by McCoyd & Kerson (2006, p. 390) as a mean of qualitative survey methodology. The only

interview to have no visual cues at all was conducted with interviewee no.2. While there were some slightly adverse effects on communication as some researchers in the field have pointed out (Argyle et al., 1968 & Cook et al., 1972 in (Halbe, 2012, p. 50), because the author and the particular interviewee (no. 2) were known to each other prior to the interview and had some familiarity with each other's speech patterns a good conversation flow, particularly around turn-taking, could be observed.

Unexpected benefits of the extended interviewing conducted remotely was the relative access to informants who may have otherwise been too busy to conduct an interview, or could do so from the comfort of their own home, and in one case an interviewee's loungeroom floor. Further, twice the author undertook a videocall from the homely confines atop his bed. Arguably the sound dampening qualities of the doona and mattress improved the audio recording as a means to eliminate excess background noise and reverberations in anticipation of the later transcription process.

Apple's FaceTime, iChat, Google Hangouts and Skype are all common and popular voice-over-IP (VoIP) platforms used for video calling (Xu, Yu, Li, & Liu, 2014, p. 826). In this study's case, whether Skype or Google Hangouts was used to conduct each interview there was no discernible difference to report in terms of technical quality. Some interviewees chose not to engage their camera.

However, the author always engaged his camera to give the interviewees the opportunity to see him during the dialogue. No visual recordings were made; therefore, the video medium was used only to support the verbal connection by way of transmitting written notes, diagrams or conveying non-verbal cues such as body or facial expressions. However, again these actions were not recorded or noted as data for analysis.

4.4.7 Means of data analysis – coding with MAXQDA

All interviews except for interview 7 were audio-recorded. Interview 7 was recorded using handwritten notes and a typed version of these notes was created (see appendix 9.19). After each interviewee the audio recordings were uploaded to transcription software HappyScribe¹¹. Then all transcripts were edited to reduce any computer errors. Some editing was done to remove excess frequency of discourse makers and filler words to improve the flow of text. Overall, this improved the data coherence. Nevertheless, in terms of quantifying this spoken, moreover written, data is not straight forward.

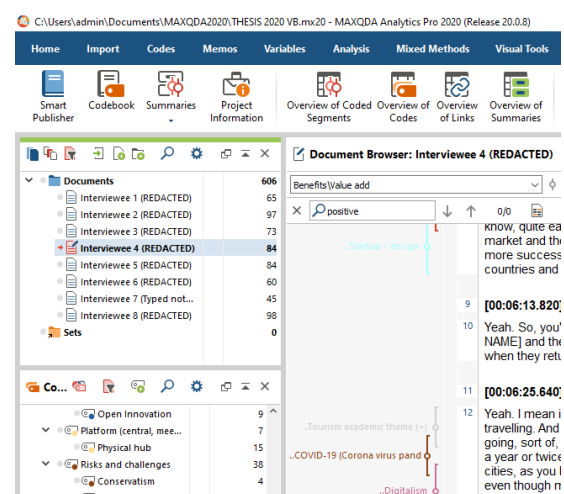


Image 2: Example of MAXQDA Analytics Pro 2020 during the coding process

¹¹ <https://www.happyscribe.co/> "Transcripts and Subtitles, by machines for humans."

Therein lies a difficulty to apply a fair weight to all data. Qualitative data such as the data that has been produced as earlier explained, is open to subjective interpretation. However, in this section it will be explained how a clear means of analysis has been applied to ensure a fair and transparent weighting of data. The empirical guidance provided to this task was inspired by LeCompte & Schensul as described by Nimmon & Stenfors-Hayes (2016, p. 3): in order to undertake a transparent analysis of the written data it is advised to undertake item analysis, followed by pattern analysis and then a structural analysis. First, multiple readings of the data were conducted usually in synchronicity to the transcription process of each text. The final reading of each text was accompanied by the coding process. That is, key phrases, in vivo words or sections of extended text were marked with a label to signify a theme. The final reading and coding process was greatly assisted by the employment of MAXQDA Analytics Pro 2020¹² as computer assisted qualitative data coding software. The codes were formed in an inductive manner. That is, rather than develop a list of codes beforehand, new codes were created as the textual analysis progressed. Inspiration for this inductive coding process can be found in Charmaz's notes on the subject (Charmaz, 2006, pp. 42-44; Hoe, Rodriguez, Üzümcüoglu, & Hyder, 2016, p. 37). Once each transcript had its text coded, a second reading was made whereby special consideration was given to the codes which were created in a later section of text or transcript to evaluate whether they fit or suited better than the current code. The coding process was only applied to the spoken words attributed to the interviewees. The next stage of coding involved pattern analysis (Nimmon & Stenfors-Hayes, 2016, p. 3), sections of coded text with the same code were then viewed together and compared to one another to again evaluate if that particular code was accurate or if it required separation. The third stage was the creation of broader themes and the grouping of codes with commonality. During this stage, many codes with only 1 or 2 sections of text were merged into a broader theme.¹³ An overview of the codes, which have been employed is available under appendix 9.8.

4.4.8 Ethical considerations for qualitative interviews

Certain ethical considerations were made in order to protect interview participants such as asking participants to consent in writing¹⁴ to an audio recording for transcription purposes as well as being made aware that anything they said could appear in this piece of work available on Aalborg University's digital project library¹⁵. At the start of each interview, again these ethical considerations were raised with the interviewees to elicit their approval or to check for any doubts or concerns they

¹² Version used was 20.0.8

¹³ For example, codes such as 'traveller behaviour', 'overtourism', 'authenticity' were grouped under the broader code 'Tourism academic theme'.

¹⁴ Via email or LinkedIn messaging.

¹⁵ <https://projekter.aau.dk/projekter/> "DET DIGITALE PROJEKTBIBLIOTEK"

may have had. It was decided to standardise the redaction and removal of the names of all interviewees as well as their places of employment¹⁶. Furthermore, any cross-references to colleagues or fellow interviewees were also redacted. After each transcription, a copy was sent to the interviewee by email to request their approval, on this Mero-Jaffe states (2011, p. 236): “participants were advised that should they find reason to correct, clarify or make additions to the interview, they were invited to do so.”. One participant took the opportunity to redact and remove parts of their transcript. This was considered without problem as a redacted interview can arguably be an even truer representation of an interviewee’s opinion. While it is not the belief that harm would befall any participants should their identities be made public by this study, the removal of the aforementioned identification markers is a sign of respect in the researcher–participant relationship (Sveningsson, 2004, p. 51). Through the act of informed consent this study forms the belief that participants knew a recording was being made and they were not under duress to express any sensitive information.

Finally, it should be noted that all views expressed are interviewee’s own personal views and do not necessarily reflect their professional views nor the views of their employers.

4.4.9 Limitations

It would not be unfair to acknowledge that there was difficulty accessing some informants during the COVID-19 pandemic. For example, one potential interviewee rejected my approaches in a stern yet polite manner (personal communication, 26 March 2020) citing work pressures due to the pandemic. Therefore, there may be issues with sample size as a larger pool of interviewees could not be reached. Nevertheless, upon reflection and textual analysis the data drawn from the collection of interviews has formed a basis from which a qualitative analysis can proceed. Ideally, conducting the interviews on-site could have meant there was opportunity to further explore questioning around the hubs’ design consideration in a heightened sensory experience.

4.5 Credibility of qualitative research

The following sections shall discuss the credibility of qualitative research through the framework of assessment set out by Lincoln & Guba ((1985) in (Beck, Keddy, & Cohen, 1994, pp. 261-262)). These four pieces of framework are Truth Value, Applicability, Consistency, and Neutrality.

4.5.1 Truth Value

Truth Value recognises that within the constructivist paradigm multiple cohabiting truths exist. It is also known as trustworthiness (Connelly, 2016, p. 435). By making audio recordings, transcribing these, submitting these to each interviewee for their approval, and supplying all the received survey

¹⁶ For example, using [COLLEAGUES’S NAME] or [COMPANY # NAME] instead of the interviewee’s actual workplace.

data (under appendix 9.21), as well as supplying the transcriptions in the appendix this study is openly presenting itself to means of auditing.

4.5.2 Applicability

The topic of applicability concerns the interdisciplinary use of the research to fields other than its direct own. It is also known as transferability. Processes of delimitation can enhance a study's applicability outside of its unique circumstances. Qualitative researchers can improve applicability by describing the "...context, location, and [the] people studied." (Connelly, 2016, pp. 435-436)

4.5.3 Consistency

Consistency relates to the ability of another researcher to repeat this study again. This stage is done by providing a demonstrable account of the steps taken during data collection. By keeping a research diary a researcher can also achieve future consistent outcomes (Noble & Smith, 2015, p. 35)

4.5.4 Neutrality: Positionality, trust, and rapport building

The final topic of Lincoln & Guba's framework concerns neutrality. It is reached once Truth Value, Applicability and Consistency have been achieved (Noble & Smith, 2015, p. 34). Undertaking any act of research involves a portion of the self in the process. Because of the unusual nature surround the data collection due to COVID-19, and because some interviewees were known to the author prior to the study's commencement, extra attention was paid to this topic.

Especially in cases where in-depth qualitative interviews (and online surveys) are conducted, the self is directly involved through its position in the researcher-interviewer role. On this note Johnson & Rowlands (2012, p. 7) acknowledge that in order "...[t]o progressively and incrementally build a mutual sense of cooperative self-disclosure and trust, the interviewer must offer some form of strict or complementary reciprocity.". What this means is a proper researcher-interviewer must also give information about themselves as part of the process to draw information from an informant. Around this they must also build an atmosphere of interpersonal trust. "[A] positive relationship between interviewer and interviewee is required" for a rich depth of data to present itself (McConnell-Henry, James, Chapman, & Francis, 2010, p. 2). From this position the opinion of the level of neutrality is considered. However, neutrality is subject to interpretation, especially in the realm of constructivism. Therefore, it would be considered endless to argue neutrality, but rather transparency is of greater value and can be achieved by acknowledging one's relationship to others and any outside influences or potential conflicts of interest at the most extreme. The rapport built or reinforced during the interviews is an example of the aforementioned trust held by both parties of one-another within a constructed safe-space. Four stages of rapport-building have been identified by DiCicco-Bloom & Crabtree (2006, pp. 316-317) as: initial, exploration, co-operative and

participation. This is expanded upon by the suggestion “... that when the researcher and participant have a pre-existing relationship the stages of rapport building are rapidly accelerated.” (McConnell-Henry, James, Chapman, & Francis, 2010). The selection of interviewees and their social distance from the researcher was addressed in section 4.4.2.

4.6 Online surveying

In order to compliment the data created through the in-depth qualitative interviews, it was determined that a limited online survey should be implemented with the aim of capturing a wide range of views from tourism stakeholders, particularly business owners or employees. The purpose was to investigate whether there is a body of support for an innovation hub with a focus on tourism in Copenhagen and Denmark, as well as gathering views on the matter.

4.6.1 Data collection

It was decided to use the SurveyMonkey¹⁷ online survey because of its compliance with GDPR 2016/679 in comparison to Google Forms. Moreover, its overall usability and design tools were favoured.

4.6.2 Design of questioning

In this section an explanation of the structuring of the line of questioning will be given. Whereas the in-depth interviews were open in their design, the survey was aimed to be short and easy for potential respondents to complete with an estimated response time of approximately five minutes given by SurveyMonkey. It is established that excess survey length can have a negative causal effect upon respondent completion rates (Lauer, McLeod, & Blythe, 2013, pp. 338-339).

The survey’s design and themes were constructed upon key themes identified during the note-taking, transcription and coding process of the in-depth qualitative interviews, thus following the sequential design of an exploratory research project as outlined earlier by Creswell & Plano Clark (2013).

After a general landing page with an introduction to the survey’s purpose and with the researcher’s contact details (a copy is available under appendix 9.8), respondents could proceed to the questions voluntarily. A complete list of the questions and available answers is available under appendix 9.10. Furthermore, in Table 4 an overview of the ten questions, their theme and their type can be viewed.

¹⁷ <https://www.surveymonkey.com/>

Question	Q#	Theme	Open/closed/semi-open
<i>In general terms do you identify your business or employer using the terms 'tourism' or 'travel'?</i>	1	Demographic	Semi-open (Multiple-choice or text-field)
<i>Which statement best describes your business or employer?</i>	2	Demographic	Semi-open (Multiple-choice or text-field)
<i>Considering your answer to question 2. Imagine a 'travel hub' exists in Copenhagen, how would you support the hub? (You may select more than 1 option.)</i>	3	Benefits; Design considerations	Semi-open (Multiple-choice or text-field)
<i>Imagine a 'travel hub' exists in Copenhagen, how would you like to interact with the hub? (You may select more than 1 option.)</i>	4	Identified gap, need or trend	Semi-open (Multiple-choice or text-field)
<i>Would you like to see more opportunities for members of the tourism industry in Copenhagen to collaborate with one another?</i>	5	Alliance building; crossings	Closed (Y/N/? ¹⁸)
<i>Would you like to see more opportunities for members of the tourism industry in Copenhagen to interact with and benefit from external partners?</i>	6	Alliance building; crossings	Closed (Y/N/?)
<i>In your opinion, what challenges does the tourism industry and its related businesses in Copenhagen face?</i>	7	Risks & Challenges & problem-based design	Open
<i>In your opinion, what challenges does society as a whole face?</i>	8	Risks & Challenges & problem-based design	Open
<i>Is there anything you would like comment on, provide feedback on or express further?</i>	9	Ethical consideration; survey feedback	Open
<i>Do you want to hear more about my project and/or are you available for any follow-up questions?</i>	10	Interest in topic; opportunity for follow-up questions	Closed (Y/Y/N)

Table 4: Key information on each question

4.6.3 Target group

The survey was designed for individuals who view themselves as having a relationship to tourism or travel either through their business or their place of employment. The size and maturity of said businesses was not discriminated against. Responses were actively encouraged from parties who had knowledge of the Copenhagen landscape. However, no question was designed whereby a respondent had to identify their residency.

Demographic questions were not deemed to be highly valuable by design, the only demographic questions included concerned the description of a respondents' business type. Contrary to Gaddis' argument (1998, pp. 67-68) these questions were positioned at the survey's onset.

4.6.4 Gathering of respondents

The survey was sent to a modest mailing list of iteratively identified business contacts. Furthermore, a public post was created on LinkedIn in order to open the survey up to respondents not already identified by the author. To increase the chances of the survey landing in the newsfeed of a potential respondent several noteworthy key words were used as hashtags including: #travel, #tourism, #innovation, #hub, #Copenhagen, #InnovationHub, #traveltech, #denmark, #travelhub, #futureoftravel, #tourism & #research. A screenshot of the post can be found under appendix 9.11

4.6.5 Ethical considerations for online survey research

While the online space may have difference in terms of users' expectations and communications forms, this study still adhered to the set of guidelines set out by the Swedish Research Council

¹⁸ A question mark denotes "I don't know"

(Sveningsson, 2004, p. 48). The guidelines offer a navigable framework for social researchers to operate within when conducting their interactions with informants (HSFR, 1990/1999 in (Sveningsson, 2004, p. 48)). These four requirements are: A) Informed consent; B) Voluntarily participation; C) Confidentiality; D) Data-for-research-only¹⁹. Points A & B have been covered in section 4.6.2 with the notes on the survey's landing page. As for point C, efforts were made to limit the personal data collected, respondents were given the opportunity to submit an email address if they wished to make themselves available for any follow-up questions or in order to express their interest in hearing more about the finalised study. In the case, that users did submit their emails, these were kept in password protected databases. As for Point D, again informants were notified of the purpose and data has only been used to support this study. Sveningsson argues this point is the simplest of guidelines to comply with when conducting interactive research online (2004, p. 54).

4.6.6 Limitations

During the course of the online survey data collection process several limitations have been identified. These limitations will be presented here. The first limitation is the added absence of the researcher during the online survey, any immediate concerns or questions from the respondent cannot be answered. There were cases of answers, which indicated some extra information could have informed the respondents in order to elicit a fuller response. Furthermore, a lack of rapport can fill this void. Attempts were made to reduce these two issues by designing the survey to make the researcher's name, email address and LinkedIn URL available to respondents. Accessibility was limited to potential respondents who were active online, furthermore it has been noted that "internet skills may increase or decrease the willingness of respondents to complete web surveys" (Dillman & Smyth, 2007, p. 91). Finally, the number of respondents who identified themselves as coming from "established players" was low (5). It could be suggested that more "established players" did not participate because they are restricted by public-relations bureaucracy, moreover startups are more approachable i.e. less hierarchical structures, or that established players do not support the prevailing concept behind the survey, therefore they had little interest in participating.

5 Analysis

Now that the contextual outlay has been given, in this chapter an analysis of the aforementioned data can proceed.

The first item of this analysis will be two case studies of existing incubator and accelerator programmes which have been identified among others to have pertinence to tourism and relevance

¹⁹ i.e. "The requirement of restricted use states that the data gathered must not be used for other purposes than research." (Sveningsson, 2004, p. 48)

to this study. These items will then be followed by sections on design considerations such as a discussion around the importance digitalism in tourism-related businesses. Following this, two sections will deliver a stakeholder map for the tourism innovation ecosystem in Copenhagen as an example of what such a mapping can look like, then examples of hub support will be addressed. The penultimate section of this analysis will then uncover the value of togetherness i.e. how serendipity can be consciously conceived by intelligent hub design. Finally, the analytical lens will then be pulled back slightly to consider survey data on not only the challenges faced by the tourism industry in Copenhagen, but also society as a whole.

5.1 Identified tourism incubators, accelerators, hubs, & labs

This study identified the following list (see Table 5) of self-described incubators, accelerators, hubs, and labs concerned with innovation in tourism. An expanded version of this list can be found under Appendix 9.12. This list was compiled through iterative desk research utilising web searches across key words. It does not claim to be an exhaustive list and it welcomes additions.

Name	Type	Note
Andalucia Lab	Centre of Innovation for Tourism	Malaga-based
EilatHub: TravelTech Accelerator	Tech Center	Eilat-based
Innovation Hub Travel Edition	Innovation Hub	Barcelona-based
Innovel	Travel tech innovation program	Tel Aviv-based
Intl. Airlines Group (IAG): Hangar51	10-week accelerator program	Spain-based
jetBlue Technology Ventures	Travel Incubator (airline)	California-headquartered
Mekong Innovative Startups in Tourism	Travel Startup Program	Mekong-based
Momondo	In-house accelerator programme	Copenhagen
MT Lab	startup incubator dedicated to tourism, culture and entertainment	Montreal-based
Nordic Travel Tech Lab	<i>Concept-only</i>	Norway-based (concept?)
Propeller Shannon	Aviation and Travel Tech programme	Ireland-based
Sèmè City	investment and development program	Benin-based
TourismX	Tourism Accelerator programme	Denmark-wide
Travel Startups Incubator	Travel incubator	Florida-based
Travelport Labs Accelerator	Accelerator programme	Denver-based (active?)
Traveltech Lab	A global hub for innovation in travel, tourism and hospitality	London-based
VoyagerHQ	startup club	NYC-headquartered
Wakalua	tourism innovation hub	Madrid-based
Wakalua/UNWTO	UNWTO Tourism Startup Competition	Madrid-based
Welcome City Lab	Tourism Incubator	Paris-based

Table 5: List of identified tourism-related Labs, Accelerator, Innovation Hub, & Incubators.

The list is a demonstration of the wide geographical span and diversity in terms of the focuses, as well as how innovation is practiced by various tourism-related stakeholders.

The following two sections will present two examples from the table above.

5.2 Case study: “Welcome City Lab” – Parisian incubator

Founded in 2013 the Welcome City Lab is a multifaceted innovation programme based in Paris, the first in the world dedicated to collaborating with tourism startups (Paris&Co, n.d.; Paris&Co, 2019). It

represents a “pioneering case” of the utilisation of incubation programmes for innovation in tourism (Bellini, Grillo, Lazzeri, & Pasquinelli, 2017, p. 144).

The Welcome City Lab exists under the umbrella organisation Paris&Co (alongside four other themed innovation programmes), a private innovation and economic development agency based in the French capital’s metropolitan region (Paris&Co, 2019). The Welcome City Lab offers a large incubation programme, which as of May 2020 consisted of 34 French and international startups (Paris&Co, n.d.). Indeed as a pioneer in this space, Welcome City Lab has attracted international attention and its managing director and founder Laurent

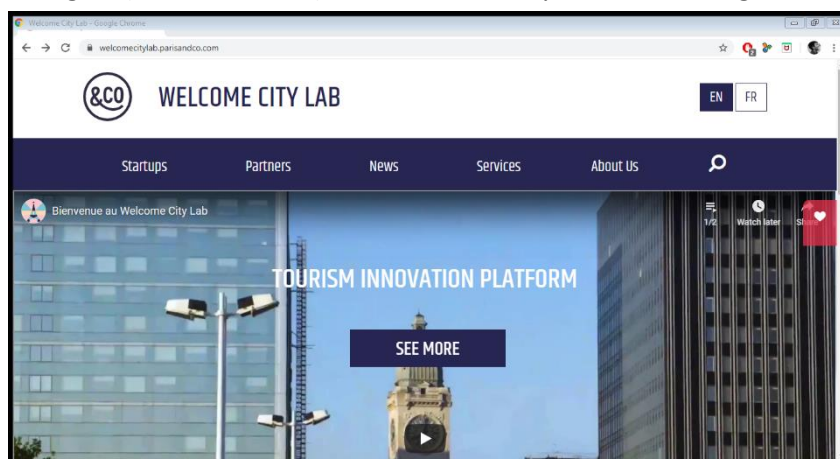


Image 3: The homepage of welcomecitylab.parisandco.com/

Queige is a sought after speaker on the topic (Hofseth, 2019; Travel Tech Conference Russia, 2018). The design of the Welcome City Lab has been conducted in a manner which incorporates both startups with a digital solution as well as those working on service or marketing based tools²⁰ (ITBBerlin, 2017). Indeed, Welcome City Lab’s model allows flexible room for tourism startups which do not offer a ‘tech-based’ solution as well as those who do. Furthermore, while the incubator focuses on the vertical of tourism, the competitive application process still allows for startups sitting outside of traditional definitions of the sector to graduate from the programme. One noteworthy example is PayinTech²¹, a technology company that “... provides connected wristbands that enable cashless transactions through an easy-to-use object.” (Travel Tech Conference Russia, 2018). These two points on the importance of digitalisation and verticalization from Welcome City Lab’s case are two very important design considerations that will be revised later in this study’s analysis.

5.3 Case study: “TourismX” – Danish tourism accelerator programme

The second case study brings the analysis closer to Copenhagen. A partnership between Wonderful Copenhagen and Danish Coastal and Nature Tourism²² bore a nation-wide innovation project focused on Danish tourism from April 2018 until February 2020 (TourismX, n.d.).

²⁰ Author’s translation of German interpreter speaking over Laurent Queige’s presentation at ITBBerlin 2017: “Digital technology is one of the most important drivers of innovation today. However, it is possible to innovate without digitalisation. One can innovate in service, and marketing too. Of course, in a startup we always have a digital footprint, however the spirit of innovation can present itself differently.”.

²¹ <https://www.payintech.com/en/home-payintech-eng/>

²² English translation of Danish “Dansk Kyst- og Naturturisme”

The project was funded by the European Union's European Regional Development Fund (ERDF)²³, a portion of private funding, as well as contributions from Denmark's five administrative regions: Region Hovedstaden, Region Midtjylland, Region Nordjylland, Region Sjælland, and Region Syddanmark. Aalborg University (AAU), Roskilde University (RUC) and the University of Southern Denmark (SDU) provided research support (TourismX, n.d.). After a competitive application process²⁴

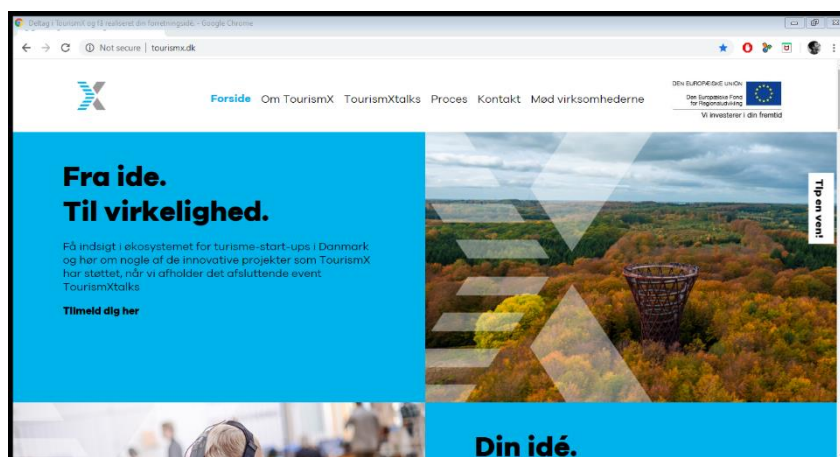


Image 4: The homepage of tourismx.dk

the programme selected 46 businesses from across the five regions to partake in a 6-month period of accelerated idea generation, and problem solving exercises (AAU Match, 2020; TourismX, n.d.). The problem-solving exercises were focused on

specific issues individual businesses faced as well as problems generated from the 10 “clusters”²⁵, which were divided evenly across the five regions. To name just a handful, some examples of the problem-based clusters are: “#1 Distribution of tourists in the city”²⁶, Region Hovedstaden; “#5 The summer house: from business to pleasure”²⁷, Region Midtjylland; “#8 Sustainability in experiences and accommodation”²⁸, Region Syddanmark (TourismX, n.d.). What this demonstrates is the importance of problem generation that is formed within its geographical surroundings. That is, TourismX participants could draw upon their experiences to understand the problem, as well as co-create solutions with their cohort so that they had ownership over these solutions to increase the likelihood of then applying them away from the accelerator.

TourismX represents an example of the first accelerator programme to cater to Danish tourism businesses. One part of its legacy is a TourismX Toolbox available on Wonderful Copenhagen's website (VisitDenmark, 2020). TourismX accelerator model includes multi-stakeholder support and an innovation environment incorporating co-created solutions to problem-based design. These factors will be discussed further in this analysis.

²³ https://ec.europa.eu/regional_policy/en/policy/what/glossary/e/european-regional-development-fund

²⁴ https://www.youtube.com/watch?v=oTEyvj_ni3I YouTube Video: “TourismX 280518 web” from VisitCopenhagen

²⁵ Author's translation from Danish: “klynger”

²⁶ Author's translation from Danish: “#1 Spredning af turister i byen.”

²⁷ Author's translation from Danish: “#5 Sommerhuset – fra business til pleasure.”

²⁸ Author's translation from Danish: “#8 Bæredygtighed i oplevelser og overnatning.”

5.4 Digitalism – The importance of digital technologies

As mentioned in this study's introduction, one of the early questions that partially inspired this study was to discover more about the neologisms 'traveltech' and 'tourismtech' etc.. Why does tourism not have such a strong footprint with such a neologism like others working with sports, health, education, or insurance do? Arguably such neologisms are branding exercises.

This section will engage a discussion around the importance, or not, of such a neologism, but also the role that digital technology can play among Denmark's tourism entrepreneurs.

Modern Denmark is society with a high degree of digital literacy. Interviewee 3 notes this:

We are a nation that is very digitalised. So, we are very familiar with NEMid, the sygesikringskort... [E]verything's put in order. We have a lot of data and we adapt all the digital things very quickly. And that is why a lot of digital products used in Denmark and Copenhagen as a launch pad as well, because they can test things quite well here. (Interviewee 3)

In this example are two important notes. Firstly, Danish entrepreneurs have access to a high level of digital services and information. And secondly, users are more likely to engage in new digital technologies as they are already used to them in their day-to-day lives.

The earlier case study mentioned the Welcome City Lab where the decision not to use the word tech in its name was deliberate, because it reflected the wide scope of entry into an innovation programme that such a decision creates. The following example from interviewee 6, indicates that firstly the Welcome City Lab is an example that is being monitored by others including DMOs, as well as the fact that the Welcome City Lab does not discriminate against non-tech startups:

[Welcome City Lab is] quite a big and often sort of emphasized as a best practice startup community or startup hub for tourism in Europe. ...[T]hey're targeting specifically not being 100 percent tech. So, they have, I think I don't remember the numbers, but I think it's like 30% or 40% of the startups that they take into their community has to be non-tech. So, it can be service innovation, service startups, you know, or other analog things. (Interviewee 6)

This example can be compared to another example from a Copenhagen-based hub when deciding how to name itself dependent on its target market. This particular hub includes open office space for diverse businesses to run their operations from.

And more than a hundred companies scattered around Copenhagen that are involved in sports tech. Actually, it's not "sports tech" now, we call it "sports innovation". There's a lot of interesting innovation that are not necessarily related to technology... (Interviewee 1)

5.4.1 Linking digitalism and scalability

Furthermore, TourismX did not brand itself as tech-only but cast a wide net across a diverse array of tourism operators in Denmark to include service innovators such as Youandx²⁹, which facilitates

²⁹ <https://youandx.com/>

client to public-speaker bookings, as well as Travel Kollekt³⁰, which designs bespoke travel guides (TourismX, n.d.). Nevertheless, TourismX did categorise its accelerator's participants, and found that there were differences in the profiles of businesses in urban environments compared to their counterparts in coastal and rural areas:

The majority in the cities were digital and also the ones with the most scalable business models. Meaning that they had the highest potential of growth and job creation, which is interesting in terms of building a Traveltech hub or just to find stakeholders in municipalities, in state and so forth, because that is something that they are very interested in. That said, when we look in the coast and countryside, there's a lot of innovative companies as well. But they're very area specific. Meaning they will reach a level of their company and then you can't really make it any bigger. (Interviewee 8)

Interviewee 8 sees a link between digitalism and scalable business models. Scalability is understood as the ability of a business to expand its reach within its current model given the addition of new resources. Similarly, interviewee 3 had this to say about scalability and its relation to pure tech business models:

...[Scalability] is really a strength of startups. They're so agile. And if they have a pure tech product, they can scale it so quickly. (Interviewee 3)

Examples of this succeeding are bike sharing applications in the Netherlands. The cited bike-sharing applications do not require physical infrastructure and can therefore operate anywhere in a given location, just by utilising in-app locking design (van Waes, Farla, Frenken, de Jong, & Raven, 2018, p. 1305). Indeed, Interviewee 3 mentioned the case of Donkey Bikes³¹ as an instance of a Danish startup which is now a front and centre part of the lived experience in Copenhagen:

I think another interesting example is bike sharing, Donkey Republic. The last five years ago... nobody knew them to begin with. And they're just like everywhere. A lot of people use them so much, both tourists, but also locals. (Interviewee 3)

Turning to the online survey now, some respondents noted that either digitalisation or the lack of it in tourism concerns them. Responding to Questions 7³² and 8³³ respectively, the following answers were given.

COVID19 Not keen on digitalization Old habits

COVID-19 aside, this response is interpreted to be a voicing of frustrations at traditional stakeholders' inability to digitalise or embrace digital solutions.

The tourism industry has gone through a digital transformation, but I think it is a challenge for some businesses to become digital such as flight sector, museums and travel agencies. So I

³⁰ <https://travelkollekt.com/>

³¹ <https://www.donkey.bike/about/>

³² Q7 "In your opinion, what challenges does the tourism industry and its related businesses in Copenhagen face?"

³³ Q8 "In your opinion, what challenges does society as a whole face?"

think right now the challenges is to survive, to be creative (in order to meet consumer demands) and to be more digital.

This second response is very interesting, because it identifies certain stakeholders (“flight sector, museums and travel agencies”) who cannot digitalise. If the respondent means that physical services cannot transcend into the digital space then perhaps this is true, however, as was mentioned earlier when introducing the Welcome City Lab, arguably there are cases of parts of these stakeholders’ business models being remodelled to become digital. Examples include e-ticketing in 1994 (Hjalager, 2015, p. 17), the introduction of Virtual-Reality into museums (Ramón-Saura, Palos-Sanchez, & de la Cruz del Río-Rama, 2020, p. 57), and the rise of forms of electronic booking platforms such as Kayak, TripAdvisor, and Trivago for Do-It-Yourself bookings.

Ultimately, from the accounts presented there is not a clear case to utilise a neologism which includes the word ‘tech’. Furthermore, there is evidence to suggest that while digitalisation of service and new digital products can be a welcome form of innovation in tourism, enforcing a ‘tech’ agenda could be deemed as excluding.

5.5 Analysing vertical & horizontal hub design

This section progresses from the earlier analysis around nomenclature to look at the importance of the tourism brand for a potential tourism-related innovation hub. Often innovation hubs must make a design decision on the focus they wish to have in order to tailor their services to clientele. In this study the terms verticalisation and horizontalisation refer to design considerations whereby a physical hub may limit (vertical) or delimit (horizontal) its interaction with innovative forces. The terms are common in business strategy lexicon and they relate to vertical markets, which are niches tailoring to a specific audience, while horizontal markets have a much wider reach to a more diverse audience regardless of niche (Investopedia, 2018; Investopedia, 2020; BigCommerce, 2020). Hubs can be vertical in design for example:

...that was what I would call a "vertical incubator" with health being the vertical. (Interviewee 2)

Creating a hub around a vertical can be advantageous if an area lacks a “centre of gravity”:

...but there was until now no platform for these companies to exchange and no centre of gravity for the sector. As we have seen with other sectors such as MedTech, Fintech and HealthTech...

(Interviewee 1)

In the latest example, the hub founder determined that no innovation hub on offer met the needs of the particular startups in their industry. It is important to note that an innovation hub can physically exist within a larger co-working venue. Examples are Copenhagen Health Tech Hub³⁴ and

³⁴ <https://www.healthtechhub.org/>

Copenhagen FinTech³⁵ which operated within the Rainmaking at Pier47 venue in Copenhagen in 2018-2019. Pier47 offered a collaborative platform, co-working spaces, event venues, and a tailored in-house innovation programme for its residents (Rainmaking, n.d.). What this example demonstrates is the possibility to establish a vertical strengthening hub within another larger venue. The benefit of such an arrangement is outlined in the following statement:

...the limitation is that you don't have your own space; you're part of something else. The upside is that it's also nice to not be mono-culture and have interactions with other industries, other companies etc.. But if you look at sports and I think, it's the same as tourism, actually it's not just one sector, because, for example, you have some in sports media, others building some kind of hardware. Others will be doing some digital platforms. So actually, it's very diverse. (Interviewee 1)

This example accounts two key factors for vertical hub design. Firstly, within a larger co-working space the interaction with others outside one's own vertical can be welcomed. Secondly, it also reflects upon the diversity of an industry when one delves into the various segmentations of a larger sector. The next example illustrates the broadness of verticals that the previous quote alluded to. It outlines active strategies to introduce variety into an incubator:

... we focus on health, which is a very broad vertical, but we invite people that don't have health backgrounds to join the health incubator. So, we will have other ways of thinking and other backgrounds and others layers of knowledge that could be interacted. (Interviewee 2)

What this example also refers to is the beneficial results of interacting with people who may have “other backgrounds and layers of knowledge”. This is reflected in Toivonen's arguments for the Social Innovation Community and the “organizational social capital” that can be unlocked through facilitating new encounters (Toivonen, 2016, pp. 55-56). The following is yet an example of the diversity within tourism, however this example frames verticalisation with a much more cautionary tone for tourism observers:

And so, I think one of the questions we also had and one of the discussions that was... that I still would say is interesting is, "Does it make sense to make it so siloed?". The reason why tourism is a fantastic field to work within, is because it goes across multiple different fields. So, tourism is transportation and service and it's wayfinding and luggage handling, it is all these different things. And so not all the startups that would, in our view, be relevant to tourism see themselves as a tourism or travel startup. (Interviewee 6)

5.5.1 Conversing outside your circle

Much more than the previous examples, this account raises concerns around merely association between already established groups to the detriment of positive impact that could come from a

³⁵ <https://copenhagenfintech.dk/> The Copenhagen FinTech Co-Lab was a forerunner of the Copenhagen FinTech Lab now based out of Christianshavn in Copenhagen.

broadening of horizons. One case from a hub catering to impact startups in London focuses on “hosting conversations with peers, stakeholders or competitors, taking people out of their silos. Its focus has been redirected towards people coming together for the creation of impact, which can take place through collective action, rather than isolation.” (Nicolopoulou, Karataş, Vas, & Nouman, 2017, p. 47).

Again, nomenclature is important, the online survey’s lead question asked respondents the following: “Q1: In general terms do you identify your business or employer using the terms 'tourism' or 'travel'?”. The results are listed in Table 6:

ANSWER CHOICES	RESPONSES	
Yes, both 'tourism' & 'travel'	47.37%	9
Yes, 'tourism' only.	31.58%	6
Yes, 'travel' only.	10.53%	2
No, neither.	5.26%	1
Other (please specify)	5.26%	1
TOTAL		19

Table 6: Q1: In general terms do you identify your business or employer using the terms 'tourism' or 'travel'?

What these results tell is that even among a relatively small sample group of identified businesses there is no clear position or preference. The one ‘Other’ response listed “*Local experience*” as a descriptor. While the question did not ask respondents to indicate their name preference for such an innovation hub, it does demonstrate variety even given a semi-open question. Again, the diversity of the field of tourism appears in the following example:

... that's really also what tourism, you know, what makes tourism quite an interesting field. Is that it is so diverse. And it actually is very accessible to a lot of different backgrounds and also a lot of different levels of education and so on, so I do think that, you know, understanding that tourism may be one of the few fields where you don't actually have to have a startup, a tech startup, but can just be on a good idea somehow. (Interviewee 6)

Here the backgrounds of the entrepreneurs are brought into focus. It argues that limiting terms may put off the types of entrepreneurs that we may need due to two possible reasons. If an “Us and Them” approach is applied then, these reasons are either: the In-Group limits access to The Other due a perceived lack of knowledge, or The Others do not perceive themselves to be part of this In-Group. Similarly to Weber’s arguments on the construction of nation-states (Weber, 2003, p. 389), and classified in modern literature by Said’s Orientalism (Said, 2003), the concept of ‘Otherness’ is not a construct that tourism stakeholders are immune to.

Interviewee 8 remarked upon their own professional background when the conversation turned to the topic of self-isolation in tourism:

It is like we do have tourism a history of just doing like this, "We are tourism. No-one understands us.". But I have no tourism background. And basically, it took me a while to understand tourism. So, I do - totally - agree that it is a really hard industry to understand. You have to be in it to kind of see it from the perspective of tourism, but it is all about collaboration.

What this example also indicates is again the importance of collaboration and a willingness to learn. If and only if there are only two sides, then all players must be willing to compromise and come to the table to learn and profit from and with one-another. This is an example of tourism profiting from what may have previously been deemed outside influence from someone with no understanding of argued intricacies of tourism.

Comparably to having a diverse scholastic and business background as a reason not to limit one's branding too sharply is the example given by another respondent when commenting on vertical design considerations within an innovation hub:

The International dimension (Interviewee 7)

This was told to be a delimiting factor which increased international exchange. Such internationalism efforts can arguably diversify a space and make it more receptive to new inputs and alternative values. This argument for internationalisation has credence as "...interaction between asset dispersion and host environment diversity impact performance positively." ((Frenz, & Ietto-Gillies, 2007; Goerzen, & Beamish, 2003) in (Herstad, Bloch, Ebersberger, & van de Velde, 2010, p. 116)). What this denotes is the value in applying open innovation thinking in hub design. Furthermore, Herstad et. al. (2008 in (Herstad, Bloch, Ebersberger, & van de Velde, 2010)) argue that it is especially worthwhile to foster "international linkages within the value chain" as these linkages can be the harvested from increased innovation activity.

What this section on vertical and horizontal design consideration of a hub has shown is that it is important to incorporate designs which provide a wide intake funnel. Not only is there a demonstrable element of diverse backgrounds in tourism entrepreneurs, but they may even not associate themselves with limiting terminology.

5.6 Stakeholder mapping of the tourism innovation ecosystem in Copenhagen

The next section will analyse stakeholders (also 'players') who have been identified through the data collection process. This stakeholder analysis will focus on tourism innovation in Copenhagen; however, its modelling may be applicable to other confines. Much like the section above on considering delimiting terminology, using SIC theory (Toivonen, 2016) this section analyses the importance of all stakeholders who impact on the effectiveness of tourism-related startups in the nation's capital. In traditional business strategy language the stakeholder environment may be described as an "business ecosystem" wherein competing interests are at play, essentially an

ecosystem is the environment where all existing players interact and build relationships with one another (Investopedia, 2019).

The results from the two direct questions on the topic of intradisciplinary collaboration (Q5) and interdisciplinary collaboration (Q6) proved extremely insightful.

ANSWER CHOICES	RESPONSES	
Yes	89.47%	17
No	0.00%	0
Don't know	10.53%	2
TOTAL		19

Table 7: Q5: Would you like to see more opportunities for members of the tourism industry in Copenhagen to collaborate with one another?

This study suggests that the “Yes” respondents in part represent a view that “members of the tourism industry”³⁶ see value in engaging with one another. This theme of value-adding will be dissected among academic discourse further in section 5.8.

ANSWER CHOICES	RESPONSES	
Yes	100.00%	19
No	0.00%	0
Don't know	0.00%	0
TOTAL		19

Table 8: Q6: Would you like to see more opportunities for members of the tourism industry in Copenhagen to interact with and benefit from external partners?

Tellingly the results from Q6 indicate a very strong desire to have more interdisciplinary interactions. Moreover, it indicates a high likelihood that respondents see potential value in external partnerships. That is to say that they may feel that the current environment in Copenhagen may not be presenting them with the tools or opportunities to solve the issues that are currently trying to tackle. Such a response sends a clear signal to all stakeholders in the tourism innovation ecosystem in Copenhagen that more interaction between members of the “tourism industry” and external partners is highly desirable.

5.6.1 Identification of key stakeholders

The in-depth interviewing process identified multiple stakeholders and partnerships interacting with one another in the tourism innovation space in Copenhagen. The analysis will now uncover some of the examples of key stakeholders identified during these interviews.

And then all other issues in relation to a city that tourism can create, right? So, you have startups, you have the established, you have the city, but then you also have the environment. Tourism is one of the

³⁶ On the survey’s landing page the term “tourism industry” was indicated to be the term that would be used in the survey for consistency purposes: “N.B. I will use the term 'tourism industry' as a general umbrella term.” See Appendix 9.8 for further details.

more unsustainable businesses of the world, because it means that people have to go from one place to another, either using a plane... (Interviewee 8)

Here “the city” is understood to be Copenhagen Municipality. The example lists startups and established businesses as contemporaries, the environment which is understood to denote the biodiverse natural environment, and airlines (under the guise of transport providers). Furthermore, examples are innovation hubs which provide co-working spaces:

...one thing is having the startups meet. You do have quite a few possibilities of doing that today Startup Village and even Rainmaking and so forth, right. (Interviewee 8)

While the following is from the perspective of a hub in another specialised sector, relevantly it does outline how private backers as well as industry foundations can be important stakeholders as well:

...we'll be able to [...] attract funding from foundations, but also from the private sector, because they will want to be part of that. (Interviewee 1)

The power of co-creation is mentioned as a process facilitated by the intersection of “brands” (understood as established businesses), tertiary education providers and students:

...brands, in turn, will be able to bring things to startups, they'll be able to co-create with startups. We have universities now, in Holland (Eindhoven), with Syddansk Universitet we have a partnership where they are bringing students to the startups to work together on challenges of the startups. (Interviewee 1)

Destination Manager Organisations (DMOs) are also mentioned as stakeholders who can support an environment of open innovation and startups:

I've seen examples of [DMOs] supporting it. (Interviewee 6)

The influence of a DMO has over a destination's image is touched upon in the following comment:

So, the branding perspective is also super important. But also, as you mentioned yourself, Wonderful Copenhagen, that has such a big influence, right? But working on an ecosystem, and giving that ecosystem a brand, that is a big part of it, because then you kind of kickstart that upward thought cycle (Interviewee 3)

Another example sees the stakeholder role of Wonderful Copenhagen as improvable. That is the interviewee believes that the DMO could achieve more if it were a private entity, rather than public, organisation:

I think often like in terms of the public institutions. There are obviously people like Wonderful Copenhagen and these kinds of guys. And they do a really good job. The issue that these kind of organizations have is they are government owned and therefore only focused in Copenhagen, which is kind of a big, how do you say, downfall for them, because they have a lot of potential if done right, I believe to potentially become private companies. (Interviewee 4)

Other stakeholders are Copenhagen Municipality's constituents who sometimes direct their agency through their relevant Lokaludvalg. These are locally elected committees focusing on hyper localised issues in a designated part of their city.

It was both the local community: We have these lokaludvalg. (Interviewee 5)

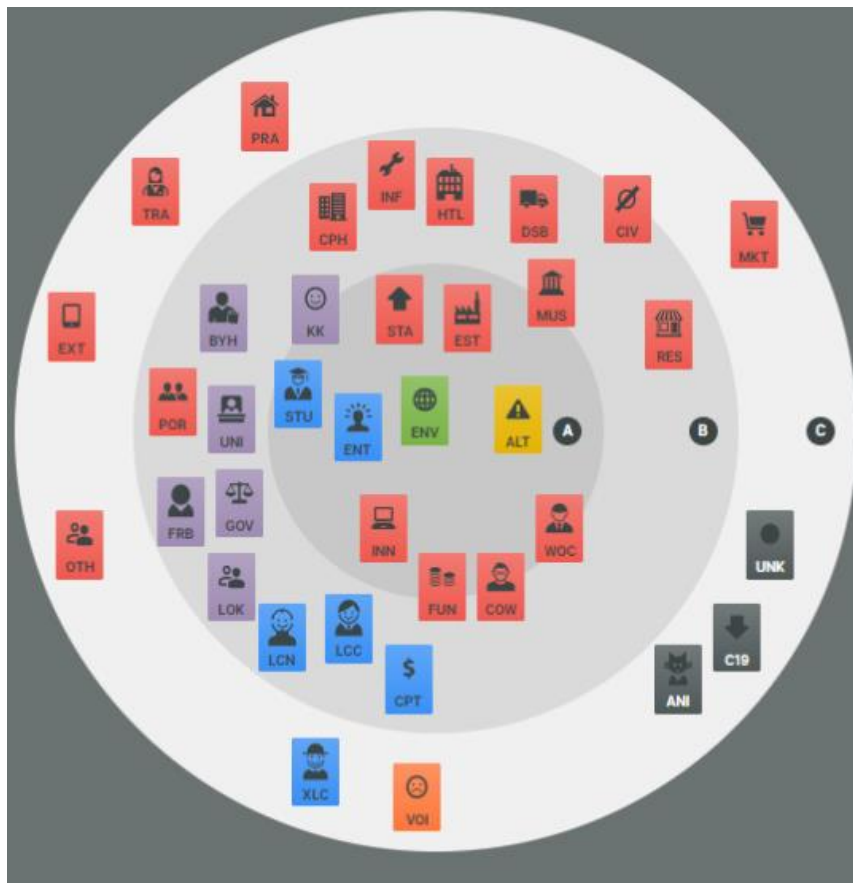
Furthermore, areas of conflict can arise between the final key stakeholders. Here "locals" react negatively to "tourists'" influence in what they deem as their local space:

And one of the things we can see is that the one thing that local people hate the most is a tourism product. [...] So, you need to, come up with double sided business models that are both focused on tourists, but also locals. (Interviewee 8)

In addition to these quotes, comments from survey respondents also indicated they were aware of the following stakeholders as well: "bigger economies"; "bike tourists"; "flight sector"; "Funding for startups"; "museums"; "old companies"; "startups"; & "travel agencies". Arguably there is a case for "Corona" / "COVID-19" to be accepted as stakeholder as well, especially if actor-network theory (ANT) is employed. Though ANT is commonly associated with artefacts and cultural goods in touristic destinations, non-human agents are considered having a sphere of influence alongside humans (Ren, 2011, p. 861; Braga & Guttman, 2019, p. S15). It is open to debate whether COVID-19's effects are real implemented by other players (i.e. a tool), or on the otherside the simple imagination of COVID-19 is a force unto itself (i.e. an independent player influencing other players' actions). This study will not engage further with this hypothesis, however further research ought to investigate the role of COVID-19 as a disease within this theoretical framework.

All of the aforementioned quotes and comments from the survey respondents mention examples of key stakeholders present in the tourism innovation ecosystem.

Image 5 is an attempt to map out the elements making up the tourism innovation ecosystem in Copenhagen. Discriptors can be found in the footnotes³⁷³⁸. This graph is not an attempt to map out stakeholders as part of a destination stakeholder analysis familiar to destination development. Rather, it aims to describe relevant players by proximity to one another as well as divide them into categories relevant to innovation. Red indicates private organisations or external agents; blue indicates individual actors; purple indicates public bodies; black indicates players that are usually not considered as having social influence (ANT); orange indicates voiceless players; yellow indicates the



need to consider alternate worldviews; finally green indicates the natural environment. Constructionist theory has informed this study to include the icons ALT (yellow) and UNK (black) as this mapping attempts to account for alternative and unrealised levels of knowledge. There are varying levels of competition between respective elements representing differing values and intrinsically

Image 5: Key elements in the tourism innovation ecosystem of Copenhagen.

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ALT Alternate worldviews;
CIV Civic Clubs & Associations;
DSB Transport Providers;
EXT Extraterritorial agents;
HTL Hotels;
KK Copenhagen Municipality;
MKT Markets & Retailers;
POR Copenhagen Malmo Port;
STU Students;
VOI Voiceless;

ANI Animals;
COW Co-Working Space;
ENT Entrepreneurs;
FRB External Municipalities;
INF Infrastructure;
LCC Locals (CPR);
MUS Museums;
PRA Private accommodation;
TRA Travel Agencies;
WOC Wonderful Copenhagen;

BYH By & Havn;
CPH CPH Airport;
ENV Natural environment;
FUN Funding;
INN Innovation Hubs;
LCN Locals (No-CPR);
OTH "Other" Destinations;
RES Restaurants & Cafes;
UNI Universities & Schools;
XLC Extra-Locals (i.e. tourists).

C19 COVID-19;
CPT Venture Capitalists;
EST Established Operators;
GOV Danish Govt.;
LOK Lokaludvalg;
STA Startups;
UNK Unknown;

³⁸ Made by the author via <https://app.smaply.com/>

motivated interests. But there are also cases of support as the next section will outline.

5.7 Hub support

The next stage of this analysis will take a closer look at the levels of support provided to hubs. It will analyse the types of support that could be relevant by highlighting insights into the past experiences of hub founders, among others.

This first example outlines how one hub founder was able to secure information and help from someone well-connected in his particular field. This person is comparable to what has previously been described as a knowledge broker (Phi, Whitford, & Dredge, 2017, p. 167):

I also got very quickly some other support from people who are very well connected with sports in Denmark and a person who is also building a platform for all sports initiatives that don't fall under the traditional DIF and DGI big sports organisation, so they don't get the central funding from the government. (Interviewee 1)

They continue to recount their experience developing a value creating network in Denmark:

And it's really a snowball effect, right? You get your first contact. I think it's important to have one or two persons in the industry that support you. (Interviewee 1)

Another example from someone with a longer history in Denmark accounts for the importance of their personal network:

And besides that, we have been using the university and our own personal networks. [...] And then I invited people from my own professional network, they came to give their responses to the first ideas. And then one of them, they became the first investor for instance of one of the teams. (Interviewee 2)

What these accounts particularly show without stating something so banal, is the significance of sound interpersonal skills to supporting valuable connections to people of influence.

The following quote reflects upon the on-going support given to one hub in Copenhagen by so called “domain-experts”:

In Copenhagen there are a lot of the domain experts who want to help. And also the health community and the health startup environment, they want to support. That is very initial. [...] And this external community has been very mature in terms of wanting to support for free the students. (Interviewee 2)

Moving from straight forward pro-bono assistance, the next example underlines the key role that financial power can play:

And then we also have established players like financial institutions, which is also essential, because they have all the resources. So, if there aren't any established players it's difficult to get sponsorship or partners in programs and stuff like that. Prizes, doing hackathon challenges, and collaborate with them. That was a strength as well. (Interviewee 3)

While the above example comes from a consultant who was drawing upon their experience in supporting the growth of the fintech scene in Denmark and therefore the types of established

players were financial institutions who have key knowledge on how to access funding, there is still applicability for other industries. This is not suggesting that when established players interact with startups, that the startups' success is purely down to the relationship being in place, however it can play a role. The difficulty in accessing funding (among other things) has been identified as a reason small and micro sized businesses are held back in tourism (Hjalager, 2010, p. 5; Halkier, 2014, p. 1660). Interviewee 3 mentions some examples of successful ventures of Danish fintech startups over recent years:

You know, financial institutions, a lot have partnered with some of the smaller ones, like Lunar Way, it's an acknowledged digital bank. And also what we see in one of our startups Undo that's an InsurTech startup, but it's still a Fintech startup or within that umbrella category, that was also developed in partnership, well financed at least by Tryg, and it's just doing very well. Also, Pleo is also just really been on a great journey. (Interviewee 3)

With an upbeat tone it is suggested that the impact of smaller players, as opposed to established players is being noticed:

And you know, nobody thinks any longer that it can't be done, small startups can really make a big difference. I think that must go for the travel industry as well, after seeing what Airbnb has done to the mindset. (Interviewee 3)

These two comments provide encouragement that today's small startups can be tomorrow's entrepreneurial success story. Mindsets of belief are replacing scepticism particularly among established players, however this can also lead to even stiffer competition as one survey respondent noted as a challenge:

Many old companies and players in the industry which makes it hard to enter.

An example from Interviewee 7 illustrates a successful public-private venture. In the example two entities, a bank and a would-be innovation hub founder, complimented each other and built upon mutual respect. They quote the colleague they partnered with from an investment bank for entrepreneurs:

'We are bankers. We understand numbers. I don't know anything about tourism. I need someone who knows the tourism industry and who has an international profile and knowledge of the public sector' (Interviewee 7)

Equally the support of the local municipality was indicated to be useful:

...Copenhagen municipality [...] they're important, they're the biggest company, you could say so, in Denmark. So, it's a good partner to have in many ways. (Interviewee 5)

Additionally, their partnership could be readily forthcoming should a jobs and growth narrative be factored in a hub's pitch as the following comment suggests:

So, the municipality can be very interested in supporting a hub like that, because if they are successful and they share knowledge, then they improve their chance of success. Then they will be probably more

jobs in the region, probably more capital. And that is just a super good for the area, right?

(Interviewee 3)

The examples displayed here have demonstrated the different types of support hubs can seek and receive from identifiable partners. Examples have shown support can range from one-on-one interpersonal partnerships to both private and public organisations supplying financial and logistical aid.

5.8 Adding value together – designing for serendipity

The previous section analysed how support from external partners can benefit an innovation hub. Now the analysis will go deeper into the hub design and consider how external support can be complimented by internal design considerations. Using both example from interviewing, as well as open innovation literature this section will argue the case that in order for an innovation hub to be effective it must make deliberate effect to design “crossings” in its users’ interactions, preferably on a daily-basis. Moreover, this design must be created in a manner, whereby firstly the frequency of serendipitous interactions is multiplied, and secondly, these interactions must add value.

It has been acknowledged that co-working spaces can foster a sense of community among their residents (Garrett, Spreitzer, & Bacevice, 2017; Jiménez & Zheng, 2018, p. 109; Blagoev, Costas, & Kärreman, 2019, p. 897). This study shares the view that a community is not a collective of members nor the “quality of their relationships, [...] rather a set of shared practices to accomplish some intended purpose.” (Garrett, Spreitzer, & Bacevice, 2017, p. 823). Additionally, a sense of community is a prerequisite for a willingness to creating value together.

The following examples demonstrate how the design of a hub affects residents’ sense of community which underscores a feeling of belonging:

I think that some of the feedback that we get, it feels like home. I think that's a very important part of it. You pay a membership fee and then you have access. [...] We have a big network that we use that and we gladly give out. (Interviewee 5)

In this example, it is argued that members feel welcome as coparticipants of the shared space by design that considers trust integral. This case is also an instance of emphasising the concept of sharing over the monetisation of services (Orel & Dvouletý, 2020, p. 19). Further, the internal formal structure of the organisation i.e. governance, can also play a role in a feeling of collective ownership, for example:

I would say that the fact that we are an association with a board of members, where 2 out of 7 are the entrepreneurs, it stands there, because it's a democratic association, where the members have a say in what we do. (Interviewee 5)

As well as the structural form of the organisation, there were anecdotes about the importance of building the physical environment together. The example given explains how through the adage of

‘out with the old, in with the new’, can reap benefits for the sense of community in a space. This interviewee recalls clearing furniture, cleaning the floors, and inviting members in to assemble new furniture together:

And then the student teams will then collect the IKEA furniture. So, it's a joint effort to build the place from scratch. [...] And that is also a metaphor, but that's how I do it, and what I did here with [COMPANY 2 NAME]. But it's also a metaphor, that you need to give people who start a new hub opportunity to start from the very scratch. (Interviewee 2)

5.8.1 Serendipity

The next examples cover the issue of serendipity. Serendipitous happenings are argued to be important to the creation of value within a shared space. Miller & Stacey argue co-working spaces offer a degree of co-locality which in turn offer “opportunities for collaboration and serendipity that can’t be recreated any other way” (2014, p. 29), they cite a social venture co-working space in the United States of America (USA), where the lack of a communal space was an “opportunity loss” (2014, p. 17). Further underscoring this is Jiménez’s assertion that an “innovation hub constitutes a space for people (mainly entrepreneurs) to connect, collaborate and be inspired in a conducive environment” (2019, p. 43). Another example comes from Bachmann who recalls the creation of a hub “...where unlikely allies would meet by serendipity.” (2014, p. 23). These examples from the literature are put into practice by one hub founder:

I try to design the crossings, so that you would meet people that you wouldn't expect to meet. So, within the frame of the hub, the surrounding walls. I try to condense the level of equality of people. [...] I will say it like particles, if you condense it to bring them together, then it's more likely that you will get to talk to each other. And it's good that you talk together. So, I increase with the hub that it's more likely that you will get to talk to the relevant people. (Interviewee 2)

This example absolutely reflects this design principle. Whether it be a microdetail such as the location of one’s seat in an office, or the time one orders their coffee as the following example demonstrates, serendipity is something that must be fostered consciously:

But bringing people together it just works. And you chat when you stand in line for the coffee and you have a community manager, that knows your challenges and you really need those warm hands and those soft skills and in the ecosystem, because otherwise it just doesn't happen. Those small random interaction is just super important. (Interviewee 3)

The above example demonstrates that the design of place and people can influence social interaction and ultimately knowledge sharing among entrepreneurs. A gap was identified by one founder:

...we saw [entrepreneurs] at that time, were starting over doing the same mistakes as someone else had just been doing. Not knowing where to go, if they needed to collaborate with private or public

organizations. So, it was about gathering knowledge and making the right links into both advisors (Interviewee 5)

That is, providing places (areas) that encourage social interaction such as crossings is important, and secondly, a centralised person can also act as a multiplier in order to direct people with similar experiences (e.g. an entrepreneur who has solved their IP woes being able to assist an earlier stage startup navigate any potential issues.) to one another. The role that such “community coordinators” can effectively play in fostering relationships within a hub is well established ((Huwart et.al., 2012) in (Kojo & Nenonen, 2016, p. 303)); (Toivonen, 2016, p. 55)).

There is, however, a fine balance to collecting the right people in the same place. People need to be relevant to each other, but not too relevant that they cannot bring any new knowledge into an interaction. In the following quote this balance is considered as it will affect positive serendipitous interactions:

And I also think that that's a pro for making it vertical that it would be more condensed. It's more likely to happen with a serendipity when you work with the vertical. The con, it can be maybe it's people that already know each other too well. And that could actually be solved by making this cross-vertical, where people don't know each other yet (Interviewee 2)

Such, serendipity can be planned in a hub’s physical layout, but it can also be facilitated by hosting in-house events and professional development opportunities. The two are not always mutually exclusive. Literature outlines that this is an example of “planned luck”, whereby the “conditions for serendipity” are cultivated. ((Austin et.al., 2012) in (Busch & Barkema, 2020)). Survey respondents indicated the following answers to Question 4 displayed in Table 9.



Image 6: An example of a co-working space's community events advertised for all to see in-house. Source: Author.

ANSWER CHOICES	RESPONSES	
I would not like to interact with the hub.	0.00%	0
Attend industry specific events.	78.95%	15
Attend networking opportunities.	84.21%	16
Drop in casually.	21.05%	4
Offer sparing opportunities.	47.37%	9
Take active part in hackathons.	15.79%	3
Use the office space.	57.89%	11
Participate in an accelerator programme.	42.11%	8
Scout for talent ie. find new employees or business partners.	36.84%	7
Host meetings.	36.84%	7
Access funding opportunities.	42.11%	8
Total Respondents: 19		

Table 9: Q4: Imagine a 'travel hub' exists in Copenhagen, how would you like to interact with the hub? (You may select more than 1 option.)

This study argues that perhaps even more important than potential day-to-day availability of an “office space” (n=11), respondents would like to have interactions with a ‘travel hub’ that include networking opportunities (n=16), and industry specific events (n=15). In fact, all 19 respondents selected at least one of the aforementioned answers, while 7 chose only 1 option from the two. Furthermore, all 19 respondents indicated at least one preference for 88 in total, for mode of interaction at an average rate of 4.63 per 1 respondent³⁹.

With the support of key literature on the “sense of community” within an innovation hub, this section has focused on how hub designers can incorporate design elements which enhance social interactions in the forms of chance or random meetings which can then add value. It has also touched upon the importance of grouping relevant knowledge with cases who may deem such knowledge as insightful. These understandings form a key basis for the final section on the role of problem-based design for the establishment of a tourism-related innovation hub.

5.9 Problem-based design considerations

The section on problem-based design consideration will fittingly draw the analysis to a close. It will underline the earlier sections around the importance of exploring digitalism, verticalisation, the available tourism innovation ecosystem, hub support, and designing serendipity, to then build a case that a hub should not exist for its own sake but for the sake of solving problems together.

Earlier work by Jiménez & Zheng argues that innovation processes should move on from a focus on competitive advantage and economic growth (2018, p. 96). This study argues then that in its place a new focal point which dictates fairer collaboration should arise. An introduction of a wider

³⁹ Total indications @ 88 / 19 Respondents = 4.6315789474

framework for co-creation solutions, could see rewards reaped for all players. Notably when the western world experienced its last major economic shock in 2008 due to the Global Financial Crisis, scholars questioned the steeped influence of a mentality favouring growth and economic profit (Phi & Dredge, 2019, p. 291). While after that crisis came a response where the concept of “Creating Shared Value” (Porter & Kramer, 2011) in (Crane, Palazzo, Spence, & Matten, 2014, p. 130)) was born, however some have argued that this led to new capitalistic forms where social and environmental issues are once again hushed for the hunt for wealth (Phi & Dredge, 2019, p. 137). It is argued this represents another iteration of greenwashing. Again in 2020 due to the COVID-19 pandemic everyone is faced with an opportunity to consider the destinations of such wealth. Nevertheless, this study argues there is value in collaboration. Even during the course of the interview process an early theme appeared, in that collective challenges and problem-based design was important to hub designers, and thus this attribute is considered to be an asset to hub residents. Some key examples include a reflective hub founder:

... one of my learnings from working with [COMPANY 2 NAME], is that society and related organisations can provide problems to the incubator to have a talent development place to work within the specific areas of problems. (Interviewee 2)

They see an importance in curated problem creation, as well as an acknowledgement that problems can be brought to a place by an outsider, supposedly because the party experiencing a problem cannot solve it themselves or by themselves. The same hub founder continues:

...maybe it's more interesting to see that the space is defined by the problem you want to solve. And then people can go to this "problem hub" in order to solve the specific problems they want to solve in this hub. (Interviewee 2)

Problem-based design does not necessarily limit itself to providing solutions to problems. There is a chance the solution might fall on deaf ears if it has not dedicated itself to understanding the problem in its whole. Speaking in general terms the hub founder stresses a need for greater “problem understanding”:

... we overfocus on the "solution solving", [...] we should focus more on the "problem understanding". So that's where there's a better fit with [...] basically all people actually. (Interviewee 2)

Let this be called a need for greater levels empathy. Empathy has defined as a foundation for human orientated design-thinking (Doorley, Holcomb, Klebahn, Segovia, & Utley, 2018, p. i). However, empathy should be employed in other design non-human orientated approaches. Sherman suggests empathy is a core competency of engaged social entrepreneurs ((2011) in (Sheldon, Dredge, & Daniele, 2017, p. 327)). Therefore, designers ought to consider being empathetic to problems including non-human actors such as the natural environment.

In order to further explore the issue of problem-based design, the survey consisted of two questions asking for responses on the perceived challenges faced. 15 open responses were recorded for question 7⁴⁰. From these 15 responses, 29 “challenges” were identified (see Appendix 9.21). A textual analysis and coding exercise then grouped the challenges. The groups were labelled by three common themes: ‘Cooperation’, ‘Sustainability’, ‘Innovation’. Due to the shortness of some responses or uncertainty about the respondents’ motivations due to a lack of context some responses were grouped under ‘Other’. The results are listed in Table 10.

Problem	Frequency	Group
“Many old companies & players”	2	Collaboration
“Internal competition”	4	Collaboration
“Affordability for students, young professionals”	1	Sustainability
“Severe effects of tourism”	1	Sustainability
“Seasonality”	1	Sustainability
“Overtourism”	3	Sustainability
“Restrictions due to COVID-19/Corona”	5	Sustainability
“Funding for startups”	1	Innovation
“Networking”	3	Innovation
“Variety of visitor experience”	3	Innovation
“Bureaucracy / regulation”	3	Innovation
“Lack of local ‘foodies’ for local fine dining”	1	Other
“Bike tourists”	1	Other
“Lack of digitalisation”	1	Other

Table 10: Common themes to Q7: “In your opinion, what challenges does the tourism industry and its related businesses in Copenhagen face?”

One key point from these responses is that firstly without unity, forward progress will be hampered. From these results it can be argued that many emerging players or startups may feel disconnected to both one-another driven by forces of internal competition, or a lack of meaningful access to established players.

5.9.1 Example of ecosystem challenges toward problem-based design

This can be related to a recount from interviewee 3 after an assessment on the “InsurTech”⁴¹ ecosystem was carried out in a city in western Germany with a strong educational sector like Copenhagen:

Where we saw that [...] they had a lot of established companies, but very few InsurTech startups and very few actually connected [in the] embedded ecosystem. (Interviewee 3)

Image 7 is an example of how an ecosystem which identifies five key players can look. Interaction can be direct from one player to the next. Challenges are identified in an ecosystem when

⁴⁰ Questions 7: “In your opinion, what challenges does the tourism industry and its related businesses in Copenhagen face?”

⁴¹ Insurance Technology

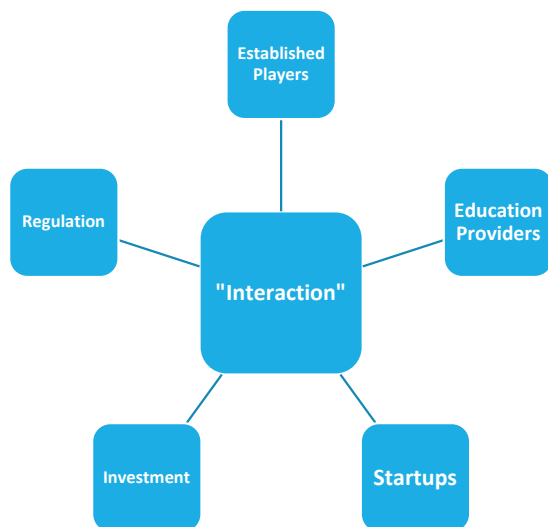


Image 7: Example of an ecosystem. Source: Author

connections are not thick or non-existent.

According to survey data, arguably the connection between tourism-related startups and established players, investment (i.e. access to funding or investment) and regulation is not a thick connection.

Strong connections between all elements are not a prerequisite for the establishment of an innovation hub. While they are desirable, thicker connections can be fostered *through* a hub. Although internal competition was identified by some as a challenge to the tourism industry in Copenhagen. The

creation of a “sense of community” can alleviate tension and drive mutual ambition. Moreover, startups need one another to solve problems together. It is argued that by forming an alliance, obstacles can be overcome together, take the following quotes as testament to this:

[Startups] can share knowledge and be in a kind of community and they can lift the same challenges collectively. And therefore, they have solved some of the primary challenges. (Interviewee 3)

Or;

In the first year we got a shit ton of entrepreneurs to come around and talk about the gaps in the ecosystem together with people from, for example, Danske Bank or the Kommune... (Interviewee 4)

Once internal competition has been lessened then there will be greater opportunities to convince some established players that it is in their interests as well to collaborate. Arguably, the longer the small fish (startups) compete among themselves the fatter the bigger fish (established businesses) will become. In the next example the importance of a symbiosis between the two aforementioned players in order to realise true potential from a tourism-related innovation hub is given:

It's not just about startups. It's just as much about the established and developing and collaborating and going forward together. (Interviewee 8)

Indeed a tourism-innovation hub, while on a day-to-day basis may host more immature startups in an incubator-like model, there exists opportunity for larger established players to interact with the hub and learn from the open innovation practices.

5.9.2 Startups' agility

A well acknowledged key attribute of startups is that they are agile, in that because of their smaller size they can often reposition themselves quicker than more established businesses. Crane et. al. warn of a tepid willingness on behalf of “...corporations to invest more in easy problems and decoupled communication strategies...” in the face of tackling larger more complex social and

environmental problems (Crane, Palazzo, Spence, & Matten, 2014, p. 137). Thus, in greater numbers a united collective of startups can also set the agenda for the future of tourism.

5.9.3 Understanding societal challenges

In order to construct an agenda, it is first worthwhile assessing what challenges society is facing. Question 8⁴² asked survey respondents to answer in an open format to the challenges they believe society faces. The results from 15 respondents (4 respondents did not enter anything) indicated a broad array of challenges. In total 27 challenges were identified by a data analysis, which were then coded and grouped into four categories: Environmental, Economic, Social, and Political. Three answers were not clear, or the respondent may have believed the question was still to be associated with tourism. This study acknowledges this may have been a failing in its questioning technique.

Challenge	Frequency	Theme
"The sustainable transition is too slow & lacks ambition"	2	Environmental (& Economic)
"Long-term sustainability (economic, environmental & social)"	1	Environmental (& Economic, Social)
"Pandemics"	3	Environmental
"Pollution"	1	Environmental
"Climate change"	2	Environmental
"Overcrowdedness"	1	Environmental
"Reliance on big economies"	1	Economic
"Economic crisis"	1	Economic
"Lack of creativity"	1	Social
"Meaningful social interactions"	3	Social
"Nepotism"	1	Social
"Fear of change"	1	Social
"Distribution of wealth"	2	Political
"Cyber warfare"	1	Political
"Lack of food supply"	1	Political
"External governmental debts"	1	Political
"Trump"	1	Political
"Development Issues"	1	See note ⁴³
Seasonality	2	See note ⁴⁴

Table 11: Common themes to Q8: "In your opinion, what challenges does society as a whole face?"

Arguably, many challenges could be grouped even tighter. However, four categories are reductionist already and many challenges when grouped then span the divide across categories. No one single challenge was clearly identified as claiming top spot. This can be put down to a small sample pool and the openness of the questioning.

⁴² Question 8: "In your opinion, what challenges does society as a whole face?"

⁴³ Lack of context means it is difficult to categorise this entry

⁴⁴ This question was perhaps not clear enough, or respondents believe seasonality is a society challenge.

Nevertheless, what the above results do indicate is that an interdisciplinary approach touching upon more than one outcome is important. Furthermore, this analysis has shown that problem-understanding is a key step in order to develop greater problem-based design for innovation hub residents.

6 Concluding remarks

As this study is slowly brought to a conclusion, it is worthy to revisit its guiding principles. It has been led by the following research question:

“How could the formation of an innovation hub with a focus on tourism, enhance already existing alliances and create new opportunities for value-creation?”

Underscoring this question were four core aims, three of which this study has visited, while the fourth will be introduced shortly (section Recommendations 6.1):

1. To explore the literature and assess the current field of play around innovation hub creation with a particular regard for startups and emerging players focused on tourism, travel or the experience economy;
2. To critically analyse challenges other innovation hub founders have encountered, and the tools and resources required to overcome them;
3. To identify modes of stakeholder support for such a project;
4. To make grounded recommendations for the development of such a place which takes the future of tourism into consideration by achieving more than solve industry-based problems.

Chapters 2 and 3 have addressed aim 1 by outlining key terminology before then demonstrating the prevailing literature in the field on the subject matter. Early on it was revealed that there is a basic need for exploratory research in the field on the establishment of tourism-related innovation hubs. Related to this was an examination of literature around open innovation in tourism, innovation hubs in Denmark and tourism, respectively. After this the review took into account literature on the terms traveltech and tourismtech, which revealed a lack of deep research in this area. Additionally, the review closed with an account of social innovation theory in order to better unpack forms of network theory necessary in order to fully conceptualise order in tourism-related innovation hubs as a collaboration and co-working model.

Chapter 4 brought the methodology tools into view. Constructivist theory was the dominant theory employed throughout, however this was paired with postpositivist theory as part of an exploratory sequential design. This mixed-methodological approach was chosen as it fit into the exploratory frame required to generate depths of new knowledge. The two main tools of data collection were accounted for in great detail, while acknowledging the means of data analysis for both in-depth

qualitative interviews conducted remotely, and the online surveying exercise. Comments on ethical considerations, and Lincoln & Guba's framework (1985 in (Beck, Keddy, & Cohen, 1994))) for assessing credibility in qualitative research were also provided particularly given the unusually circumstances due to the COVID-19 pandemic under which a large portion of this study was conducted.

Chapter 5 examined the study's main discoveries and delivered in terms of providing insights to aims 2 & 3. Providing a frame for key yet delimited recommendations to be made for the establishment of a tourism innovation hub.

In summary, as many survey respondents and interviewees highlighted, there will be unforeseeable effects caused by the COVID-19 pandemic. There is no simple "Before Corona, Corona and After-Corona" time-period, the effects will be with society forever. Just like the trouble with using the term *post-colonial* (McClintock, 1992), suggesting that a clean slate is possible is also problematic. Because of the evolving situation which is affecting the global market economy at different rates it is impossible to predict the future or plan too far into 2020 and beyond, nevertheless early estimates indicate troubled waters are ahead especially for tourism as a victim (Gössling, Scott, & Hall, 2020). But there is also a chance to reverse the victim mentality. Throughout this study and especially during the coding exercise, it was difficult to delineate between terms such as benefits, requirements, risks, challenges, and opportunity. These five words share a lot with one another despite some being others' antonyms. In innovation, opportunity sits ever on the edge of challenge. One survey respondent aptly commented the following:

Again, Corona has created a huge challenge for all tourism businesses and the related ones. I think there will be more collaborations between businesses in the tourism industry as a business might struggle alone, and therefore businesses will collaborate in order to survive.

New forms of collaboration are required to tackle challenges whether these challenges are climate change or COVID-19 pandemic. Even the reorganisation of location to increase the day-to-day interactions as the earlier analysis argued will assist. Examples such as the world's first incubator dedicated to the tourist sector in the form of the Welcome City Lab in Paris and the recent TourismX accelerator programme facilitated by Wonderful Copenhagen and Dansk Kyst- og Naturturisme demonstrate that tourism-related businesses are receptive to embracing new innovation models such as the incubator or co-working arrangements that prioritise social interaction as a means of creating collective value.

6.1 Recommendations

With the key findings from this study, this section will address the final research aim (4) of making grounded recommendations for the development of such a place which takes the future of tourism

into consideration by achieving more than just solve industry-based problems. These recommendations while formed with Copenhagen in mind, do not limit themselves to Copenhagen in setting. The knowledge that has been created with applicability to other settings.

This study recommends the following pieces of advice for the establishment of a tourism-related innovation hub incorporating a model of co-working:

- 1) Informal alliances should take place, regardless of supposedly more influential voices not acting. Even grassroots collaboration is and should be made possible.
 - a. Grassroots initiatives should take note of the success of the 'jelly' model of informal co-working spaces (Orel & Dvouletý, 2020, p. 16).
- 2) Approach future exploration with a collectively open yet radical mindset. Consider everything once and judge everything on its values.
- 3) Engage informed individual and institutional knowledge brokers for assistance.
- 4) An event or activity should not use the term "networking" purely off the cuff. Networking for networking's sake does not bring anything. Actors network to find solutions for their issues now or for a rainy day. This means that interdisciplinary crossings, must be designed with attention paid to empathy for residents' current needs.
- 5) Any innovation hub should be inclusive in symbolism and design, rather than setting strict isolationist parameters, this includes a recommendation against using a naming suffix such as "-tech".
- 6) It should be a place that encourages others to learn about society's challenges by exploring tourism themes in a manner that is welcoming and speaks in clear language.
 - a. It should be a place that builds bridges to others to realise their relevance to tourism.
- 7) Pre-existing co-working space providers should be considered as a physical venue.
 - a. Co-working spaces should encourage community interdisciplinary collaboration and internationalisation policies.
 - b. Commercial spaces which only offer office space should be ignored. (Information of co-working venues in Copenhagen is available under appendices 9.22 & 9.23.)
- 8) Notwithstanding the previous point, but considering lower international visitor numbers (Gössling, Scott, & Hall, 2020) forecast for 2020 , any such alliance could do worse than approach hotels and other venue providers to investigate a pilot programme being hosted at their premises.
- 9) A problem catalogue should be formulated with the societal challenges that the hub's occupants seek to address.

6.2 Genuine interest

As touched upon in the recommendations, grassroots action is possible, but this study believes a model which engages with more than just startups will be more successful in the long run.

Nevertheless, this study's exploration has found welcoming encouragement during its entire course from both interviewees with offers of mentorship to funding advice, as well as the names of contacts, some of whom who have helped contribute to this study's data. The genuine interest and curiosity to be involved or informed is both encouraging and importantly an asset to the future establishment of a hub.

6.3 Further developments and research possibilities

This study has only scratched the surface of what tourism innovation hubs as co-located work venues mean. Further research is encouraged to undertake further case studies on travel hubs, labs, incubators, and accelerator programmes. The issue of governance and potential support from established players for industry related tourism hubs ought to be investigated with regard to Denmark. Establishing a greater body of literature around the casual linkages between hub formation and funding opportunities is encouraged. Moreover, future studies could concentrate on the lived experiences of hubs' residents rather than the approach in this study, which while necessary, prioritised a canvassing of hub founders' opinions.

7 Disclosure statement

The author holds a contract of employment at Rainmaking ApS. This was disclosed to interviewees and available via his LinkedIn profile. The author carried this study out independent of any third-party support including Rainmaking ApS.

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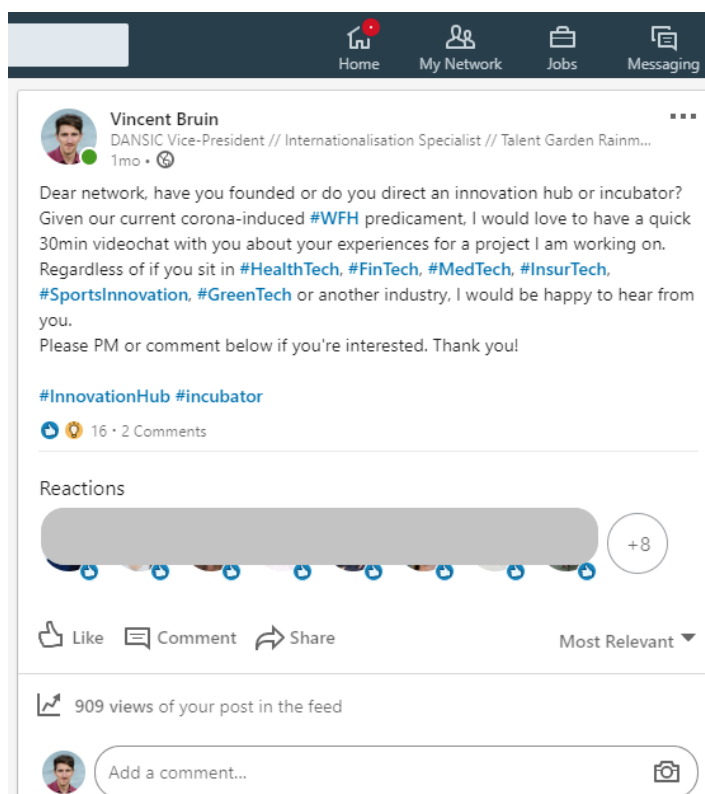
9 Appendices

9.1 Appendix – Aernoudt's typology of business incubators (Aernoudt, 2004, p. 128)

TYPOLOGY OF BUSINESS INCUBATORS				
	Main philosophy: Dealing with	Main Objective	Secondary	Sectors Involved
Mixed incubators	Business Gap	Create Startups	Employment creation	All Sectors
Economic Development Incubators	Regional or local disparity gap	Regional Development	Business Creation	All Sectors
Technology Sectors	Entrepreneurial gap	Create Entrepreneurship	Stimulate innovation, technology startups and graduates	Focus on technology, recently targeted, e.g. IT, speech-biotechnology
Social Incubators	Social Gap	Integration of social categories	Employment creation	Non-profit sector
Basic Research Incubators	Discovery Gap	Bleu-Sky research	Spin-offs	High-tech

Aernoudt's typology of business incubators (Aernoudt, 2004, p. 128). Reproduced by author.

9.2 Appendix – Screenshot of LinkedIn post asking for interview participants



Personal information such as profile photos have been obscured for privacy reasons. Available at https://www.linkedin.com/posts/vincent-bruin-bb12a6115_wfh-healthtech-fintech-activity-6646026851074613249-Omgi/

9.3 Appendix – Interview questions (Hub Founders/Managers Qs)

Interview questions (Hub Founders/Managers Qs)
Can you provide a brief background on the Hub that you have founded?
Why did you found this hub?
Why did you found your hub in Copenhagen?
What kind of considerations did you have to take when designing the hub?
What do you believe are the benefits to those in hubs?
What do you believe are the benefits for those interacting with the hub from the outside in?

9.4 Appendix – Interview Questions (Tourism startup co-founder)

Interview questions	Follow up Qs if not answered in main question
Can you provide a brief background on your business?	What stage is your business at?
	What problem is it solving?
	Given your business' stage, what kind of inputs or resources are you currently looking for?
How would you describe the travel ecosystem in Copenhagen?	Do you feel connected to the ecosystem? If so, how?
	Who makes up the Travel ecosystem in Copenhagen?
Why did you found your business in Copenhagen?	
Have you looked at joining a hub or co-working space? Why/why not?	(At what stage would you consider this?)
	What do you believe are the benefits to those in hubs?
	What do you believe are the benefits for those interacting with the hub from the outside in?

9.5 Appendix – Interview Questions (tourism consultancy CEO)

Interview questions
What are some similar initiatives in Copenhagen?
Why don't we have a tourismtech hub in Copenhagen already?
One of the arguments put forward by many hub founders is that they create a "centre of gravity" and a meeting point, physically speaking as well. Given this, does Copenhagen have a centre of gravity in tourism?
What challenges and advantages does Copenhagen offer to a potential hub?

9.6 Appendix – Interview Questions (Senior Manager at DMO)

Interview questions

Can you provide a brief background on your business?

In your words, what is TourismX?

Why(not) put Travel and Tech together?

In a time of isolation, why is a tourism vertical important?

9.7 Appendix – Example of email to potential interviewee

Dear [detail redacted],

I hope you are staying healthy amid this period of uncertainty framed by COVID-19.

My name is Vincent Bruin and I am a M.A. Tourism candidate at Aalborg University - Copenhagen. [detail redacted] suggested I contact you for the purposes of my thesis.

I am currently writing my thesis on the possible development of a traveltech hub in Copenhagen. Thus I am interviewing various stakeholders. During my conversation with [detail redacted] indicated that you would be someone worth speaking with, because of your involvement with [detail redacted].

Long story short, would you have time this week for a 30-45 min chat on the telephone or video call?

Thank you for reading my email. I look forward to hearing from you.

*Kind regards,
Vincent*

Some details have been redacted.

9.8 Appendix – Codes identified using MAXQDA software

Colour	Parent code	Code	Cod. seg. (all documents)	% Cod. seg. (all documents)	Documents	Colour
●	Design Considerations	Design Considerations	54	8.91	8	●
●	Risks and challenges	Risks and challenges	38	6.27	7	●
●	Alliance building	Alliance building	35	5.78	8	●
●	Benefits	Benefits	32	5.28	7	●
●	Copenhagen (location, attributes)	Copenhagen (location, attributes)	30	4.95	7	●
●	Innovation	Identified gap, need or trend	24	3.96	7	●
●	Risks and challenges	Financial considerations (investment etc) (+)	24	3.96	7	●
●	Horizontalisation	verticalisation (+)	22	3.63	8	●
●	Innovation	Innovation	22	3.63	7	●
●	Sustainability (inc. green entrepreneurship)	Sustainability (inc. green entrepreneurship)	20	3.30	5	●
●	Alliance building	Partners	17	2.81	5	●
●	General - Intro/Outro	General - Intro/Outro	16	2.64	8	●
●	Hubbing (incl. accelerator)	Travel innovations hubs	16	2.64	3	●
●	Horizontalisation	Horizontalisation (Tourism & industry X)	15	2.48	8	●
●	Platform (central, meeting place)	Physical hub	15	2.48	7	●
●	Design Considerations	crossings	14	2.31	7	●
●	Hubbing (incl. accelerator)	Hubbing (incl. accelerator)	14	2.31	4	●
●	crossings	interaction between players	13	2.15	6	●
●	Alliance building	Established players	13	2.15	5	●
●	Horizontalisation	Horizontalisation	13	2.15	5	●
●	Startups	Startups	12	1.98	4	●
●	General - Intro/Outro	Background	11	1.82	5	●
●	Benefits	Value add	10	1.65	6	●
●	Fintech ecosystem	Digitalism	10	1.65	3	●
●	Copenhagen (location, attributes)	Denmark	9	1.49	7	●
●	Innovation	Open Innovation	9	1.49	4	●
●	Risks and challenges	COVID-19 (Corona virus pandemic. Effects etc.)	9	1.49	4	●
●	Benefits	Community, sense of	9	1.49	3	●
●	Tourism's profile	Tourism academic theme (+)	7	1.16	3	●
●	Platform (central, meeting place)	Platform (central, meeting place)	7	1.16	1	●
●	Startups	Startup - design	7	1.16	1	●
●	Copenhagen (location, attributes)	The Nordics	6	0.99	4	●
●	Design Considerations	Problem-Based Design	6	0.99	3	●
●	Alliance building	Stakeholder analysis	5	0.83	3	●
●	Alliance building	Inter-Collaboration	5	0.83	2	●
●	Benefits	Members-only benefits	5	0.83	2	●
●	Fintech ecosystem	Fintech ecosystem	5	0.83	2	●
●	Risks and challenges	Requirements	4	0.66	4	●
●	Risks and challenges	Conservatism	4	0.66	3	●
●	Startups	Diversity	4	0.66	3	●
●	Copenhagen (location, attributes)	Centrality (location)	4	0.66	2	●
●	Copenhagen (location, attributes)	Perceived brand	3	0.50	3	●
●	Tourism's profile	Tourism's profile	3	0.50	2	●
●	Hubbing (incl. accelerator)	Startup programme	2	0.33	2	●
●	Startups	Interest from startup	2	0.33	2	●
●	Hubbing (incl. accelerator)	Traveltech conference	1	0.17	1	●

9.9 Appendix – Copy of survey landing page

Master Thesis: Travel hub Copenhagen 2020

My name is Vincent Bruin. I am currently writing my M.A. Tourism at Aalborg University Copenhagen. I can be contacted by email at vbruin18@student.aau.dk or via [LinkedIn](#).

My thesis investigates what an innovation hub as a physical gathering point and for businesses and small companies in the tourism and travel industries in greater Copenhagen could look like. (N.B. I will use the term 'tourism industry' as a general umbrella term).
I am seeking inputs from emerging and established players.

By clicking 'Next' and proceeding, you acknowledge that your participation in this survey is voluntary and that any answers you give may appear in my thesis.

My thesis will be published at the following website: <https://projekter.aau.dk/projekter/>

Your participation is greatly appreciated.

Next

9.10 Appendix – Online survey questions

PAGE 1/5

*1. In general terms do you identify your business or employer using the terms 'tourism' or 'travel'?

- ☐ Yes, both 'tourism' & 'travel'
- ☐ Yes, 'tourism' only.
- ☐ Yes, 'travel' only.
- ☐ No, neither.
- ☐ Other (please specify)

*2. Which statement best describes your business or employer?

- ☐ "I consider my business or employer an established player."
- ☐ "I consider my business or employer an emerging player or startup."
- ☐ Other (please specify)

*3. Considering your answer to question 2. Imagine a 'travel hub' exists in Copenhagen, how would you support the hub? (You may select more than 1 option.)

- ☐ Use it for event-hire.
- ☐ I would not support it.
- ☐ Take up a paid residency.

- ☐ Take up a free residency.
- ☐ Contribute funding.
- ☐ Contribute speakers to events.
- ☐ Refer others to it.
- ☐ Other (please specify)

*4. Imagine a 'travel hub' exists in Copenhagen, how would you like to interact with the hub? (You may select more than 1 option.)

- ☐ Drop in casually.
- ☐ Take active part in hackathons.
- ☐ Attend industry specific events.
- ☐ Host meetings.
- ☐ I would not like to interact with the hub.
- ☐ Offer sparing opportunities.
- ☐ Scout for talent ie. find new employees or business partners.
- ☐ Use the office space.
- ☐ Participate in an accelerator programme.
- ☐ Attend networking opportunities.
- ☐ Access funding opportunities.

Other (please specify)

PAGE 2/5

5. Would you like to see more opportunities for members of the tourism industry in Copenhagen to collaborate with one another?

- ☐ No
- ☒ Yes
- ☐ Don't know

6. Would you like to see more opportunities for members of the tourism industry in Copenhagen to interact with and benefit from external partners?

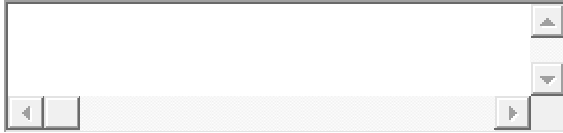
- ☒ Yes
- ☐ No
- ☐ Don't know

PAGE 3/5

7. In your opinion, what challenges does the tourism industry and its related businesses in Copenhagen face?



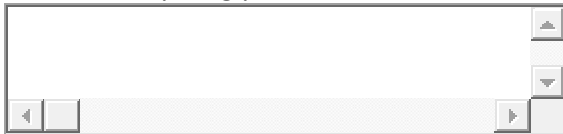
8. In your opinion, what challenges does society as a whole face?



PAGE 4/5

This is the final page. Here you have a chance to express any comments or feedback you may have as well as let me know if you would like to hear more about my project.

9. Is there anything you would like comment on, provide feedback on or express further?



10. Do you want to hear more about my project and/or are you available for any follow-up questions?

- ☐ No
- ☐ Yes, I may be contacted for further questioning.
- ☐ Yes, I want like to hear more about this project.

If yes, please enter your email address below:



PAGE 5/5

Thank you

Thank you for participating in my survey.

If you feel this survey could be applicable to any of your colleagues, please consider sharing it.

If you would like to find out more about this survey or my thesis project you may contact me at vbruin18@student.aau.dk

9.11 Appendix – Screenshot of LinkedIn post seeking survey respondents



Personal information such as profile photos have been obscured for privacy reasons. Available at https://www.linkedin.com/posts/vincent-bruin-bb12a6115_master-thesis-travel-hub-copenhagen-2020-activity-6663105062157500416-4V5G/

9.12 Appendix – Expanded list of identified tourism-related hubs, incubators, etc.

All descriptions have been compiled from the respective organisation during March – May 2020.

Name	Description Supplied from website	Website
Andalucia Lab	<i>Andalucía Lab somos un centro impulsado por la Consejería de Turismo, Regeneración, Justicia y Administración Local, que ofrecemos soluciones prácticas e innovadoras a las pymes, profesionales y emprendedores de la industria turística andaluza, trabajando para construir un destino turístico más competitivo, mediante el estímulo de las competencias digitales y tecnológicas de las miles de pequeñas empresas que componen el sector.</i>	https://www.andalucialab.org/
EilatHub: TravelTech Accelerator	<i>The Eilat tech center Hub is leading the most southern and one of the fastest growing innovation ecosystems in the startup nation of Israel.</i>	https://www.eilathub.co.il/

Innovation Hub Travel Edition	<i>Innovation Hub Travel Edition is building an extensive community in the travel and tourism digital innovation sector. We're connecting, sharing knowledge and resources with international hubs to foster the creation of powerful synergies and boost open-innovation initiatives in the industry.</i>	https://mobileworldcapital.com/travel-innovation-hub/
Innovel	<i>InnoVel engages international travel and hospitality corporations with the vibrant Israeli startup ecosystem, acting as a Tel Aviv-based external innovation arm.</i> <i>We connect our corporate members with relevant startups, combining synergies and knowledge, and enabling viable and valuable business cooperation from initial contact through full implementation.</i>	https://innoveltraveltech.com/
Intl. Airlines Group (IAG): Hangar51	<i>Over the 10-week programme, you will co-work with our teams at Iberia, Vueling or IAG Cargo to run a joint proof of concept which you will showcase to senior management across the Group. You will have access to real world operational environments, work with experts across the industry and receive tailored mentorship and support from a senior sponsor.</i>	https://www.hangar51.com/
jetBlue Technology Ventures	<i>It's simple. We invest in and partner with early-stage startups improving the travel, hospitality, and transportation industries. We've taken JetBlue's original mission to bring humanity back to travel and are expanding it on an unprecedented scale – we want to improve the end-to-end experience for travelers everywhere, whether they're flying or not. And we believe that partnering with game-changing technology companies is a great way to do it.</i>	https://www.jetblueventures.com/about/
Mekong Innovative Startups in Tourism	<i>Accelerating the growth of innovation-driven enterprises in tourism and travel tech</i>	https://mist.asia/
Momondo	<i>Scale up your business with support from one of Denmark's biggest digital pioneers</i>	https://www.momondo.dk/c/accelerator/
MT Lab	<i>The first startup incubator dedicated to tourism, culture and entertainment in North America, the MT Lab was created in 2017 by UQAM and Tourisme Montréal. Both a meeting place, a startup accelerator and a platform for exchange, the MT Lab hosts each year a cohort of young companies creating innovative solutions for major players in the industry. The MT Lab is inspired by the Welcome City Lab program in Paris.</i>	https://mtlab.ca/en/
Nordic Travel Tech Lab		None found
Propeller Shannon	<i>Shannon group's International Aviation Services Centre (IASC) and DCU Ryan Academy for Entrepreneurs came together to create a unique Aviation and Travel Tech programme. Supported by Enterprise Ireland and The Irish Aviation Authority, the Propeller Shannon Accelerator programme will drive the growth of start-up aviation companies and participate in their success, with a goal of producing the next generation of companies of global significance.</i> <i>Propeller Shannon has partnered with the global leaders in Aviation and Travel Tech in Europe such as Boeing & Datalex.</i>	https://propellersnn.com/about-us

Sèmè City	<i>The first edition of the Challenge Fund took place in 2017 and brought entrepreneurs together to reflect on and innovate in the tourism sector. Following a rigorous selection process, 4 projects were prized at the Innovation Made in Africa Forum (FORIMA). The entrepreneurs who received \$ 150,000 are currently supported in the implementation of their prototypes by Incub'IMA, Sèmè City's first incubator.</i>	https://semecity.bj/en/
TourismX	<i>TourismX er et landsdækkende projekt, der skal styrke innovationen i dansk turisme. Formålet med TourismX er at koble virksomhedernes vækstideer med nyeste forskning og viden med henblik på udvikling af innovative produkter og services.</i>	http://tourismx.dk/om-tourismx/
Travel Startups Incubator	<i>TSI helps travel startups commercialize travel technology with larger travel companies through our Traction Program, 1-Day Symposiums and Innovation Program.</i>	https://www.travelstartups.co/about/
Travelport Labs Accelerator		None found
Traveltech Lab	<i>Traveltech Lab is a community that aims to foster innovation, collaboration, and creativity, and bring together technology startups with big corporates within the travel industry.</i> <i>Through our tailored events programme, bespoke introductions and organised pitch opportunities we have supported almost 100 travel tech startups on our journey so far.</i>	https://thetramperry.com/programmes/traveltech-lab-membership-pr
VoyagerHQ	<i>Voyager HQ is the startup club for the global travel, tourism, and hospitality industry. Our community brings together entrepreneurs, corporate partners, and investors from around the world to create the future of travel experiences through curated events, educational content, actionable introductions and collaborative innovation initiatives. The Voyager HQ community spans over 2,000 entrepreneurs in over 430 cities around the world.</i> <i>We are headquartered in NYC and operate our signature event series, .events, in six cities in the United States and the UK. Voyager HQ chapters are actively expanding into new cities around the world, creating local communities of engaged travel entrepreneurs, investors, and partners.</i>	https://voyagerhq.com/
Wakalua	<i>wakalua is the first global innovation hub for tourism boosting innovation through unique public-private partnerships in more than 150 countries.</i>	https://www.wakaluahub.com
Wakalua/UNWTO	<i>For the second straight year, the World Tourism Organization (UNWTO) is running the world's largest startup competition in tourism boosted by wakalua, the global tourism innovation hub.</i> <i>Together with our corporate partners we want you to tackle the core concepts of travel shaping the sectors future. Beat your competition with the most disruptive, innovative and sustainable solution and become the next game changer in tourism.</i>	https://tourismstartups.org/

9.13 Appendix – Interviewee 1 (Founder of hub)

9.14 Appendix – Interviewee 2 (Former hub manager)

9.15 Appendix – Interviewee 3 (Project manager at consultation agency)

9.16 Appendix – Interviewee 4 (Co-Founder of startup)

9.17 Appendix – Interviewee 5 (Founder of innovation hub)

9.18 Appendix – Interviewee 6 (CEO of tourism consultancy group)

9.19 Appendix – Interviewee 7 (Founder overseas-based travel hub)

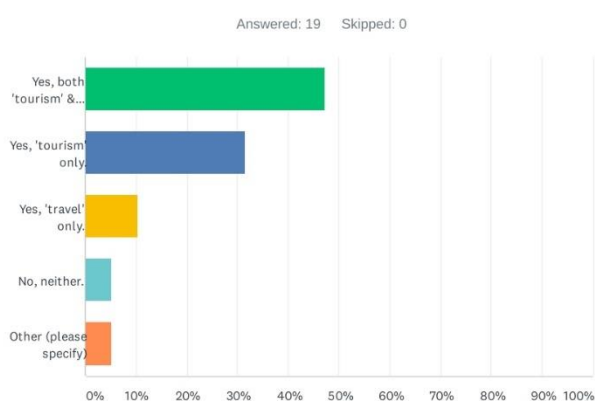
9.20 Appendix – Interviewee 8 (Senior Manager at DMO)

9.21 Appendix – Complete Online Survey Response Data

Master Thesis: Travel hub Copenhagen 2020

SurveyMonkey

Q1 In general terms do you identify your business or employer using the terms 'tourism' or 'travel'?

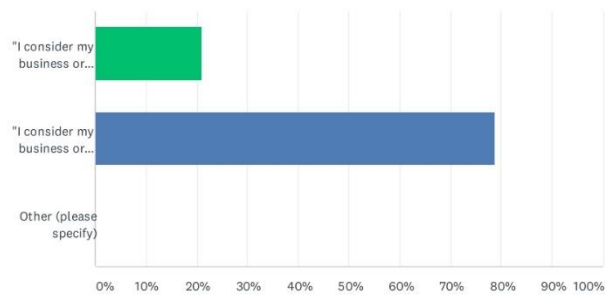


ANSWER CHOICES		RESPONSES	
Yes, both 'tourism' & 'travel'		47.37%	9
Yes, 'tourism' only.		31.58%	6
Yes, 'travel' only.		10.53%	2
No, neither.		5.26%	1
Other (please specify)		5.26%	1
TOTAL			19

#	OTHER (PLEASE SPECIFY)	DATE
1	Local experience	5/5/2020 8:33 PM

Q2 Which statement best describes your business or employer?

Answered: 19 Skipped: 0

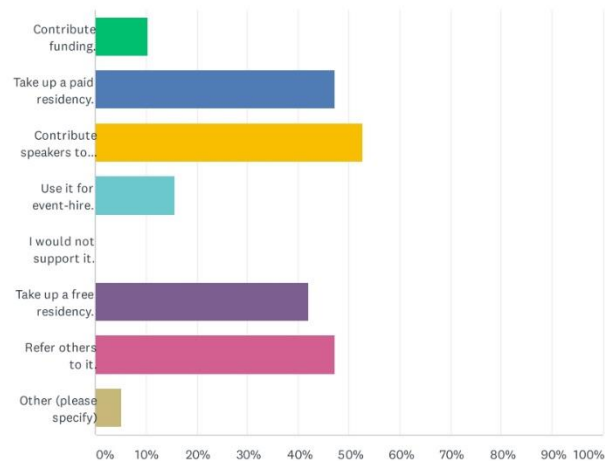


ANSWER CHOICES		RESPONSES	
"I consider my business or employer an established player."		21.05%	4
"I consider my business or employer an emerging player or startup."		78.95%	15
Other (please specify)		0.00%	0
TOTAL			19

#	OTHER (PLEASE SPECIFY)	DATE
There are no responses.		

Q3 Considering your answer to question 2. Imagine a 'travel hub' exists in Copenhagen, how would you support the hub? (You may select more than 1 option.)

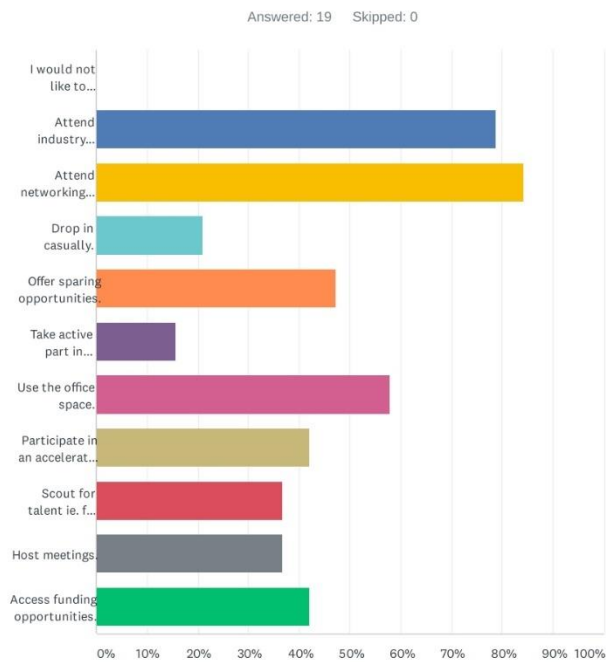
Answered: 19 Skipped: 0



ANSWER CHOICES		RESPONSES	
Contribute funding.		10.53%	2
Take up a paid residency.		47.37%	9
Contribute speakers to events.		52.63%	10
Use it for event-hire.		15.79%	3
I would not support it.		0.00%	0
Take up a free residency.		42.11%	8
Refer others to it.		47.37%	9
Other (please specify)		5.26%	1
Total Respondents: 19			

#	OTHER (PLEASE SPECIFY)	DATE
1	Collaboration	5/6/2020 10:53 AM

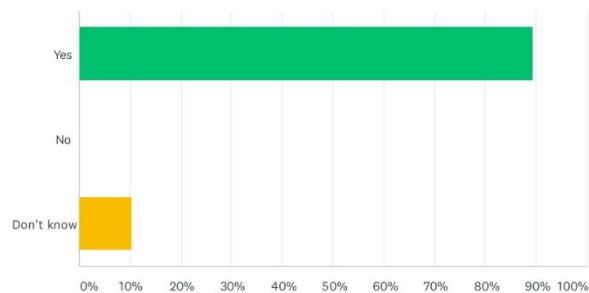
Q4 Imagine a 'travel hub' exists in Copenhagen, how would you like to interact with the hub?
(You may select more than 1 option.)



ANSWER CHOICES		RESPONSES	
I would not like to interact with the hub.		0.00%	0
Attend industry specific events.		78.95%	15
Attend networking opportunities.		84.21%	16
Drop in casually.		21.05%	4
Offer sparing opportunities.		47.37%	9
Take active part in hackathons.		15.79%	3
Use the office space.		57.89%	11
Participate in an accelerator programme.		42.11%	8
Scout for talent ie. find new employees or business partners.		36.84%	7
Host meetings.		36.84%	7
Access funding opportunities.		42.11%	8
Total Respondents: 19			
#	OTHER (PLEASE SPECIFY)	DATE	
	There are no responses.		

Q5 Would you like to see more opportunities for members of the tourism industry in Copenhagen to collaborate with one another?

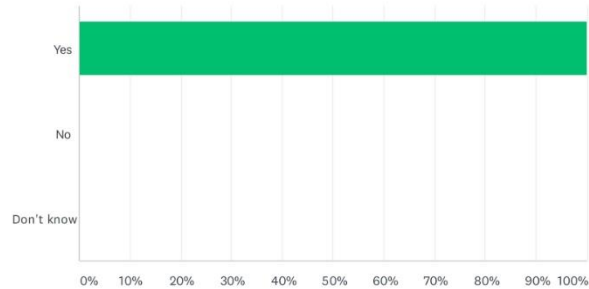
Answered: 19 Skipped: 0



ANSWER CHOICES		RESPONSES	
Yes		89.47%	17
No		0.00%	0
Don't know		10.53%	2
TOTAL			19

Q6 Would you like to see more opportunities for members of the tourism industry in Copenhagen to interact with and benefit from external partners?

Answered: 19 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	100.00%	19
No	0.00%	0
Don't know	0.00%	0
TOTAL		19

Q7 In your opinion, what challenges does the tourism industry and its related businesses in Copenhagen face?

Answered: 15 Skipped: 4

#	RESPONSES	DATE
1	High competitive environment. Corona isn't helping either.	5/25/2020 9:14 PM
2	Many old companies and players in the industry which makes it hard to enter. Bureaucracy and expensive membership fees if you want to collaborate with them.	5/18/2020 9:41 AM
3	Lack of affordable options for students, young professionals, and general adults	5/9/2020 12:53 AM
4	sustainable tourism development - is it possible? both environmental and social sustainability is continuously being challenged by the severe effects of tourism	5/6/2020 10:55 AM
5	Seasonality	5/5/2020 9:14 PM
6	Ensuring the city is a lively city in other neighborhoods of the city. Spread out the density.	5/5/2020 8:35 PM
7	Currently, restrictions of travel. Restaurants, especially fine dining have a hard time due to the lack of "foodies" who travel far to experience the top restaurants of the world in Copenhagen.	5/5/2020 3:03 PM
8	You can not answer this question without mentioning the challenges the tourism industry face due to Corona. Before Corona I think the challenges in Copenhagen were overcrowding of tourists in the city centre and bike tourists not knowing the bike rules. However, Corona might change these two issues in Copenhagen because of a decrease in the number of tourists visiting Copenhagen.	5/5/2020 1:03 PM
9	A lot of internal competition between the organisations and many, many different offices all involved more or less directly in the same activities. Very bureaucratic.	5/5/2020 12:49 PM
10	Funding for startups, networking,	5/4/2020 7:51 PM
11	(Tourism-related) businesses, incl. startups, rather compete with each other than support each other or establish mutually beneficial partnerships that could bring both parties to success. This challenges the variety of existing businesses, the tourism industry itself, as well as other things, such as the visitor experience.	5/4/2020 7:10 PM
12	COVID19 Not keen on digitalization Old habits	5/4/2020 1:53 PM
13	Lack of networking events	5/4/2020 12:37 PM
14	Overtourism – said in other words; attracting the right tourists	5/4/2020 12:09 PM
15	A lack of focus on innovation within the world's biggest market	5/3/2020 4:19 PM

Q8 In your opinion, what challenges does society as a whole face?

Answered: 15 Skipped: 4

#	RESPONSES	DATE
1	The sustainable transition is going to slowly and not ambitious enough. Too much focus on economic growth instead of taking the environment into consideration along side the growth. Also a challenge that we are reliant on much bigger economies too work together with us in the transition.	5/25/2020 9:14 PM
2	Seasonal based tourism, hard to survive in the winter	5/18/2020 9:41 AM
3	Meaningful Social Interactions	5/9/2020 12:53 AM
4	Long-term sustainability (economic, environmental and social)	5/6/2020 10:55 AM
5	Seasonality	5/5/2020 9:14 PM
6	Development challenges	5/5/2020 8:35 PM
7	Pandemics, cyber warfare, lack of food supply, pollution.	5/5/2020 3:03 PM
8	Again, Corona has created a huge challenge for all tourism businesses and the related ones. I think there will be more collaborations between businesses in the tourism industry as a business might struggle alone, and therefore businesses will collaborate in order to survive. The tourism industry has gone through a digital transformation, but I think it is a challenge for some businesses to become digital such as flight sector, museums and travel agencies. So I think right now the challenges is to survive, to be creative (in order to meet consumer demands) and to be more digital.	5/5/2020 1:03 PM
9	to much focus on growth and less on quality of life.	5/5/2020 12:49 PM
10	Ability for mindful discussion, fair distribution of wealth, eradication of nepotism.	5/4/2020 7:51 PM
11	In which context? This is from a startup perspective: Perhaps a lack of trust towards something new, or a fear of change. One cannot make something better if they do not give it a chance. For example, people have become much more open and collaborative during the times of Coronavirus, maybe because it was already so big of a change to the "everyday" that people are much more open for new ideas.	5/4/2020 7:10 PM
12	Pandemics Economic crisis Climate change Governmental external debts	5/4/2020 1:53 PM
13	Being social	5/4/2020 12:37 PM
14	Overcrowdedness and rising prices.	5/4/2020 12:09 PM
15	Climate change and Trump	5/3/2020 4:19 PM

11 / 14

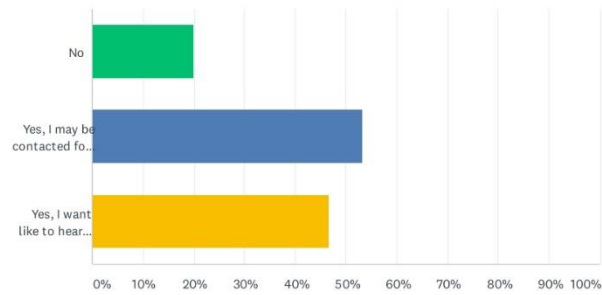
Q9 Is there anything you would like comment on, provide feedback on or express further?

Answered: 5 Skipped: 14

#	RESPONSES	DATE
1	Really interesting idea!	5/6/2020 10:55 AM
2	Perhaps it should be a Danish/National travel hub and not a Copenhagen one as Denmark is very, very small and having participated with my company in the national TourismX project I am aware that there are many cool projects happening outside of Copenhagen, perhaps even more than in the capital itself. We just tend to "forget that"	5/5/2020 12:51 PM
3	A travel hub would bring travel/tourism-related businesses and entrepreneurs towards a more accepting and collaborative relationship, and in my opinion, this can be crucial especially in cities, like Copenhagen, which try to grow tourism.	5/4/2020 7:15 PM
4	no	5/4/2020 12:38 PM
5	No	5/3/2020 4:20 PM

Q10 Do you want to hear more about my project and/or are you available for any follow-up questions?

Answered: 15 Skipped: 4



ANSWER CHOICES	RESPONSES	
No	20.00%	3
Yes, I may be contacted for further questioning.	53.33%	8
Yes, I want like to hear more about this project.	46.67%	7
Total Respondents: 15		

#	IF YES, PLEASE ENTER YOUR EMAIL ADDRESS BELOW:	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		

9.22 Appendix – Co-working spaces in Copenhagen (Map)



Image 8: Source Google Maps 2020. Location of 32 co-working spaces in Copenhagen (excluding 'The Camp' in Ballerup).

9.23 Appendix – Co-working spaces in Copenhagen (List)

Venue	District	Website
5teSTED	København K	https://www.5tested.dk/ https://www.coworker.com/denmark/copenhagen/better-office
better office	København K	https://bloxhub.org/
BLOXHub	København K	https://symbion.dk/lokationer/howitzvej/ https://www.coworker.com/denmark/copenhagen/cuttles-friends
Creators Floor	Frederiksberg	http://dare2mansion.com/en/contact/
Cutlets & Friends	København K	https://disie.dk/ https://copenhagenfintech.dk/startups/copenhagen-fintech-lab/
DARE2Mansion	Østerbro Kongens	
DISIE	Enghave	https://foundershouse.dk/ https://greencubator.dk/
FinTech Lab	København K	http://kontorpladser.dk/ http://kontorpladser.dk/
Founders House	København S	http://www.laoficina.dk/ http://liftoffcph.dk/
Greencubator	Nørrebro	https://www.melt.dk/ https://www.sohonomads.dk/en/noho
Kontorpladser1	København K	https://www.nomadworkspace.com/ http://republikken.net/
Kontorpladser2	København K	https://www.officehub.dk/lejemaal/rocket-labs http://www.skraacph.dk/
La Ofcina	Frederiksberg	https://www.soho.dk/ http://www.spilhuset.com/
Liftoff CPH	Frederiksberg	
Melt	Østerbro	https://www.sportslab.sport/ http://www.studio-cph.com/
NOHO	Vesterbro	https://symbion.dk/ https://talentgarden.org/da/coworking/denmark/copenhagen-rainmaking/
Nomad Workspace	Nørrebro	
Republikken	Vesterbro	
Rocket Labs	Nordvest	
Skrå	Nørrebro	
SOHO	Vesterbro	
Spilhuset	København K	
SportsLab	København K	
Copenhagen	København K	
Studio-CPH	Østerbro	
Symbion Fruebjergvej	Østerbro	
Talent Garden	København K	
Rainmaking	København K	
The Camp (Rainmaking)	Ballerup	https://thecamp.io/ https://therabbithole.dk/
The Rabbit Hole I/S	Frederiksberg	https://think.dk/ https://umaworkspace.com/
think.dk	Østerbro	
UMA	København K	
WeWork	Vesterbro	Was due to open in May 2020

---- END OF APPENDICES ----