Hitters, E. (2020). Research for innovation: improving the management of co-located and clustered industries. In U. Rohn & T. Evens (Eds.), *Media Management Matters. Challenges and Opportunities for Bridging Theory and Practice* (Media Management and Economics Series, 5) (pp. 173-187). New York: Routledge

11

RESEARCH FOR INNOVATION

Improving the Management of Co-Located and Clustered Industries

Erik Hitters
ERASMUS UNIVERSITY ROTTERDAM

Introduction

From the early 1990s, the co-location of industries, workers and entrepreneurs has risen to the attention of both academics and urban policy makers. The tendency to cluster was particularly visible in the field of cultural production and in creative and media entrepreneurship (Karlsson & Picard, 2013; Porter, 2000; Pratt, 2008). The emergence of media, cultural and creative clusters demonstrates the significance of co-location. In globally and digitally connected industries, place is still important because local networks are grounded in particular places where culture is produced and consumed (Cairncross, 1977; Currid, 2007; Davis et al., 2009; Markusen, 1996; Wijngaarden et al., 2019). In media management literature research into media clusters has become established recently (see Komorowski, 2017; Virta & Lowe, 2017).

The Cultures of Innovation in the Creative Industries (CICI) research project focused on such co-located industries. It examined how creative business centres for small and medium-sized companies foster innovation, develop entrepreneurship and which management interventions are conducive to these goals. Even while the creative industries as a term is notoriously difficult to define as well as heavily contested, we have used it in our research in order to be able to encompass the broad range of firms in the locations we researched. Many of these could also be labelled as media industries, or information industries as most of them produced creative content relying on mass and digital media for their business ventures. Our locations represent the width of the creative industries, including many media firms active in broadcasting, publishing, film, music, games, advertising, public relations, digital design and digital media.

The multidisciplinary and cooperative focus of the companies in the buildings, as well as the curation and community management within them, made these places an interesting research environment. In this research, we focused on the development of and interrelationships between companies, markets, networks and the places where they are located, and on the

practices of innovation and management, creative work, business conditions, knowledge and information spill-overs, mediation and technological needs. How effective has these centres' management been as intermediaries for creativity and innovation? What are the specific economic (value, performance, employment) and socio-cultural (symbolic value, atmosphere, branding, working conditions) effects of co-location? Our focus was on the practices within these creative business centres and their role as intermediaries in fostering collaboration, entrepreneurship and innovation. In other words, how does the process of innovation actually work? In our view, such innovation emerges in places by agents in a structural context, embedded in interactive processes of embodied learning and feedback (Wijngaarden et al., 2016).

In addition to offering insights about the collaboration between creative businesses, in this chapter we will also analyse the collaboration between the researchers in the project and the businesses involved. Partner in this research was the Dutch Creative Residency Network (DCRN), a network of 30 creative business centres across the Netherlands, where around 2,000 companies are located. We will include a critical reflection on the interactions of the researchers and public and private stakeholders – an evaluation of the collaboration in itself. Of particular interest are also the workshops and seminars that were offered to location managers. The research provided answers to questions on the impact and effectiveness of management on co-located businesses. The utilisation of this knowledge was a central aspect to the research design. In addition, this work has offered insights, examples and best-practices about collaboration, growth and innovation of creative businesses. We will critically elaborate on our method of knowledge utilisation and discuss how we were able to provide added value and cross the bridge between research and industry.

An important part of the sector's agenda focused on strengthening the base of expertise for the creative industries by making existing knowledge accessible, developing new knowledge and realising the link between science and practice. Our project raised a number of questions that are of vital importance to this sector. Not only did we contribute to the academic understanding of the innovation process, we also provided insight into the role of research in the innovation ecosystem and how may we raise practitioner's awareness of the conditions under which innovation take place. Thus, sharing our results and knowledge with the sector was central to our project. The centrality of knowledge in the innovation process is convincingly explained by Bathelt and Cohendet (2014). According to them,

> processes which lead to innovation require dynamic knowledge flows about the relevant knowledge structures and practices and their dynamics. The processes by which new developments of ideas and artefacts crystallize are generally referred to as knowledge creation … [These] processes are shaped by specific circumstances, which is exactly why constant flows of knowledge and efforts to access and process this knowledge are so decisive. (pp. 869–870)

Understanding how innovation works, is an important prerequisite in developing instruments in order to make the creative industries more innovative and competitive. Our research project aimed to reach precisely that, as well as looking at actual intervention policies, the role of intermediaries and the ways in which they could impact the everyday working environment and business practices. It generated knowledge about the specific conditions under which the creative industries can realise their innovative potential. Furthermore, it helped in

understanding the contextual and organisational factors underpinning the development of creative entrepreneurship. In close knowledge exchange with the businesses involved, the results could translate into opportunities for the creative industries nationally as well as internationally.

Although creativity and innovation have become very fashionable terms in policy, business as well as academia, there is a lack of scientific and strategic knowledge about the contextual and embedded nature of relationships and networks that enable and sustain creativity and innovation in the creative and media industries (Cunningham, 2013). As Pratt and Jeffcutt (2009) label these terms as 'snake oil for the 21st century', academic knowledge about the precise and place-specific conditions under which creativity may lead to innovative outputs is still scarce. Valuable work has been done on the meso and macro-level of firm interactions (Davis et al., 2009, Potts et al., 2008). Within firms, creativity is often approached as a managerial or socio-psychological phenomenon, which may be maximised in order to generate innovative outcomes (Amabile, 1997; De Vaan et al., 2015). Much less is known about the micro-interactions between small and medium-sized firms in small-scale clusters. Furthermore, managerial and policy interventions in clusters are often prescribed but hardly subjected to research on their effectiveness. Our research made an attempt at filling part of that gap, by taking a mixed method comparative approach in order to better understand how particular types of knowledge relationships in particular contexts may lead to innovative outcomes.

Understanding the innovation process is crucial not only to the media industries but also to other creative industries, or even the knowledge economy as a whole. We emphasised understanding such spill-overs not just in terms of direct spill-overs and knowledge transfers (Ibrus, 2019) but also in the form of reputational economies. Knowledge and value in the creative industries are crucially related to place reputation and the dynamics of taste. Reputation economies affect products' value and are very often related to and supported by the reputation of the place they are brokered and sold within. Subsequently, our results added to the legitimacy of the creative industries as a sector that is of vital importance to a sustainable knowledge economy.

The Research Project

The CICI research project ran between 2013 and 2018 and focused on innovation practices in the Dutch creative industries. It examined such practices in creative business centres (CBCs), buildings offering co-location facilities to small and medium-sized businesses. Partner in our research was the DCR Network, a network of 33 creative hubs across the Netherlands, where around 4,000 companies are located. They represent the width of the creative and media industries, ranging from marketing agencies to app developers. They included the following subsectors: advertising, architecture, arts and antiques, crafts, design, designer fashion, digital and entertainment media, film, video, photography, music, performing and visual arts, software and electronic publishing, TV and radio and publishing industries. Our overall research question addressed the impact and effectiveness of CBCs as intermediaries for creativity and innovation. What are the specific economic (value, performance, employment) and socio-cultural (symbolic value, atmosphere, branding, working conditions) effects of co-location for the creative industries? The research explored the development of and interrelationships

between companies, markets, networks and the places where they are located (the CBCs) and the effects of their co-location on both the companies themselves, their competitiveness, their cooperation and their practices of innovation. Specific questions focus on management practices, creative work and working conditions, knowledge innovation and information spill-overs, mediation, creative entrepreneurship and reputation. In other words, what happens in co-located creative industries places, under which economic and social conditions and with what kind of innovative outcomes.

In close cooperation with DCRN, our industry partner, we selected ten creative business centres, where we conducted research under the administrators and the tenants. The location managers were active in project management. Our ten partner CBCs were spread throughout the Netherlands and were of different sizes. The smallest CBC in our sample accommodates 50 entrepreneurs, and the largest CBC houses 400 entrepreneurs. The research team consisted of a PhD student, a post-doctoral researcher and the project leader, assisted by several student assistants. Our research consisted of three stages. In the first stage of the research we developed a substantive secondary review of creative markets and information sources; and of questions about the situated mediation of knowledge. This stage identified gaps in the existing data sources, and developed ways to ensure more accurate data and information on the creative industries. In addition, a first round of interviews (N=32) among location managers and companies was carried out articulating the challenges and needs of both creative entrepreneurs and the managers of the locations. Methods used here were secondary analysis of existing research, data sources and literature as well as expert interviews.

In the second and third stages of the research our methodology consisted of a mixed methods approach. First, 43 in-depth interviews were conducted with creative entrepreneurs between September 2014 and October 2015. Through convenience and snowball sampling our sample of 43 respondents represented a broad range of industries and diversity in age and gender. The in-depth interviews deepened our knowledge and insights that were gathered in the previous stages of this research, specifically looking at day-to-day business practices of creative entrepreneurs. They focused on issues related to creative labour, knowledge, competition, cooperation and innovation. All interviews were coded in Atlas.ti in an inductive approach resembling the grounded theory method developed by Strauss and Corbin (1990). We used a thematic analysis, aimed at uncovering the conditions of innovation in order to compare and contrast with the existing literature (Braun & Clarke, 2006). Second, the interviews were also used to develop items that served as the basis for quantitative analyses in the next stage.

In the third stage, the Cultures of Innovation in the Creative Industries (CICI) Survey 1 and 2 provided the empirical quantitative data for our research. These surveys mainly focused on working conditions in creative business centres, creative labour and entrepreneurship, passion for work, entrepreneurial identity, place reputation and innovation. Out of the sample of 998 firms located in our 10 centres a total of 319 (1) and 207 (2) surveys were completed. The quantitative data collected in this stage charted how the selected creative companies assess their business practice, creative labour, working conditions, knowledge mediation, innovation, and informational and technological needs. With respect to the locational cultures of innovation, the data provided key economic indicators of the selected creative hubs and how they assessed their role and effectiveness as intermediaries and facilitators. In that way, we could find answers to the question of the specific economic (value, performance, employment)

as well as socio-cultural (symbolic value, atmosphere, branding, working conditions) effects of co-location that could be identified for the creative firms concerned.

Assessing Societal Impact

In order to assess whether and to which degree scientific research has contributed to society or industry, a wide body of research is available. A synthesising effort in this field has resulted in the Societal Impact Value Cycle (SIVC) model (Van de Burgwal et al., 2018). This model (Figure 11.1) has been developed in order to be able to assess the effectiveness of so-called valorisation practices by academic researchers. The model posits that academic knowledge is central to any society's innovation ecosystem.

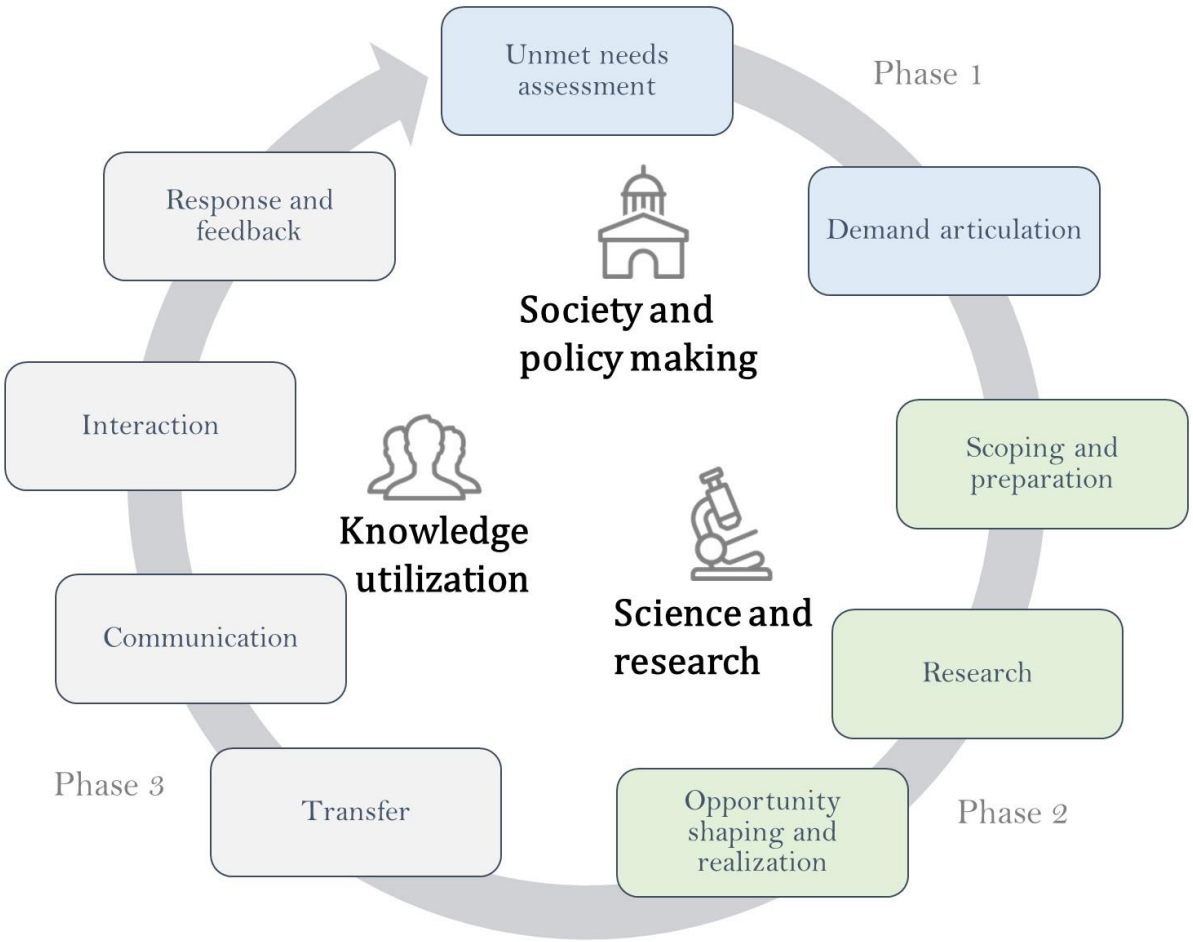

FIGURE 11.1 Societal Impact Value Chain (adapted from Van den Burgwal et al., 2018)

> In order to derive socio-economic benefits from academic knowledge, a process that transfers the knowledge to society and translates this knowledge into valuable products and services is necessary … Here we use the term knowledge valorisation, since it encapsulates the concept of *transferring* knowledge or technology to actors with an industrial or societal perspective and the concept of *commercialising* knowledge by adapting and developing the knowledge in order to yield socioeconomic benefits. (p. 9)

Van der Burgwal et al. (2018) specifically draw attention to the fact that valorisation turns academic knowledge into value for society by making it suitable and available for societal or economic purposes (Van den Nieuwboer et al., 2016; Van Geenhuizen, 2010). The second half of the model thus specifically incorporates commercial development and market deployment.

However, with respect to commercialising knowledge, or in other words bringing it to the market, we may ask ourselves whether this should in fact be an objective of publicly funded research in subsectors where innovation often remains hidden (Cunningham, 2013). Especially when looking to enhance the awareness of a certain sector with respect to the process of innovation, it may be a bridge too far to be also held responsible for providing the tools to commodify or commercialise the knowledge generated by academic research. This implies that the second half of the model may need significant adaptation.

Instead of discussing valorisation in terms of commercial development and market deployment, it may be better to use the terminology of *knowledge utilisation*.

In their work on the uses of social sciences, Landry et al. (2001) draw attention to the context in which knowledge is produced and processed and the different ways this is influenced by the contexts in which scientists and users operate. In order to do that, we need to turn the attention to the actions that individual researchers undertake to promote the utilisation of their research results. Here we follow Landry et al. (2001) and suggest to follow an interaction perspective, which states that knowledge utilisation depends on various disorderly interactions occurring between researchers and users rather than on linear sequences beginning with the needs of the researchers or the needs of the users. Sometimes, a difference between the culture of science and the culture of users leads to a lack of communication between them and, consequently, to low levels of knowledge utilisation. However, the more sustained and intense the interaction between researchers and users, the more likely there will be utilisation. It suggests giving a greater attention to the relationships between researchers and users at different stages of knowledge production, dissemination and utilisation (Landry et al., 2001). We thus refrain from discussing the latter two stages of the SIVC and replace these by a discussion of interactive knowledge utilisation.

Needs Assessment and Demand Articulation

The first stages of the Societal Impact Value Cycle include a careful assessment of needs and a subsequent articulation of the demands for research. Policy makers and representatives for the societal domain cooperate to identify unmet needs and subsequently evaluate these in order to prioritise those needs that are most urgent or most feasible to tackle. Prioritisation as such does not mean that the needs with the highest priority will be articulated as a demand to the academic domain since demand articulation depends on dynamics in the policy or industrial

domain. Identified demands are translated into directions for solutions and objectives for research and innovation projects. These solutions and objectives are based, among other things, upon the feasibility of knowledge-based solutions and the necessity of new knowledge development versus the availability of already developed knowledge. Alignment of the society and policy domain with the science domain occurs via research agenda-setting, and the management of stakeholder expectations. This kind of assessment of needs and the articulation of demands took place within the research agenda-setting of the government-funded Topsector Creative Industry.

The project was part of a larger programme, initiated by the Dutch Research Council (NWO), the main Dutch research funding organisation. The programme focused on making knowledge accessible for the creative industry, developing new knowledge and realising the link between science and practice. To achieve this, NWO specifically included measures to ensure that the desired collaboration between researchers and entrepreneurs and the valorisation of the knowledge acquired could be realised in a mutually acceptable manner. In all cases projects needed to be realised with consortia of at least one knowledge institution and at least one private party, possibly supplemented with other private and or public or semi-public parties. With this programme, NWO deliberately connected to the innovation agendas of the Topsector Creative Industry, which received strong government support. The CICI project specifically related to the innovation agenda of the CI Next Business Innovation network. In an appendix to the call, the need for academic research and knowledge development was clearly articulated: 'Capitalising on innovation opportunities at a sector level, regional level or even national level calls for knowledge development, strategy and actions that are beyond the scale of individual businesses. Research can be used to help identify such opportunities and develop models for exploiting them' (NWO, 2012, pp. 4–5) The call further specified that for the creative industries, a network-based approach would be preferable for the development of knowledge, identifying 'opportunities for the sector, and also on developing the best possible conditions to enable the creative industries sector to realise its economic and social value. This last aspect also includes detecting bottlenecks and barriers to development, as well as ways of overcoming them or reducing their negative impact' (NWO, 2012, pp. 4–5).

On a more practical level, in the science domain, the SIVC model suggests that ideas for research projects can be based upon articulated demands or interactions with societal actors. These ideas are evaluated and project preparation activities are conducted, such as establishing joint R&D partnerships and developing solid research proposals (Van de Burgwal et al., 2018). In our case, the research proposal was carefully prepared in collaboration with our partner DCRN. DCRN is a major player in the Dutch start-up movement and helps to develop the country's enterprise culture. It is a unique network without parallel in Europe. Established in 2010 it connects 33 creative hubs in 18 cities in 11 provinces, housing 4,000 companies with collectively nearly 10,000 employees (https://dcrnetwork.nl/). Many of these hubs or complexes are housed in emblematic older industrial buildings that have been refashioned for the new economy. DCRN aims to provide its members the opportunity to improve the environment for their tenants. It is a platform for knowledge and exchange on the entrepreneurs' level, between members and between government and industry. DCRN strives to make the creative industry clear and accessible, encourages knowledge exchange and

strengthens its economic vibrancy. Our research was an important pillar in the knowledge and research agenda of DCRN.

In our collaboration with societal stakeholders, we were very aware of the needs for tangible or even intangible research output (such as support for legitimation, as we will elaborate further). According to Van der Burgwal et al. (2018) not all academic researchers are aware of the possibilities for further development of their research output and therefore the promotion of disclosure opportunities and the identification of findings are vital steps in the progress of the value cycle. Via DCRN we conducted research under the administrators and the tenants of 10 co-location complexes. But they were not merely the subject of research. DCRN and the companies they represent provided in-kind contributions to this project. These consisted of over 1,000 professional working hours by the companies involved in the research. Tasks consisted of collecting data from the company on the financial performance, labour, transactions etc., as well as providing information through detailed surveys and interviews. Also, the location managers were active in the project management.

In the first stage of the research we did a first round of interviews among the business centres' managers and the companies, which was carried out in close collaboration with our business partners and the intermediary organisations. These interviews charted more precisely the specificities of each location involved and identified a number of practice-based business cases.

Questions asked in this first stage focused on key findings in previous empirical research (both quantitative and qualitative) into creative industries networks and hubs or clusters, with respect to economic value, performance, innovation and spill-overs. We looked at the role of both institutionalised as well as informal location-based networks and how they have been identified as being central to the value adding capacities of creative industries. Also we charted the availability of national as well as international data sources on the creative industries in order to measure economic value, performance, innovation and spill-overs. Finally, our interviews focused on characterising context (culture), management and organisation in all of the participating locations. The findings of this first stage were crucial in setting the agenda for the subsequent stages.

Research Collaboration and Findings

In the two-step mixed method approach of the subsequent stages we conducted interviews and two surveys. All respondents were housed in our ten creative business centres, and these locations' managers or directors served as gatekeepers for reaching the potential respondents. For the interviews, we proceeded by means of convenience and snowball sampling: finding respondents 'on the go' and by being forwarded by interviewees. Our primary selection criterion was self-identifying as working in the creative and media industries.

The respondents were asked, among some other topics, about their professional work, their perceived creativeness and entrepreneurship, their definitions of innovation in general and for the creative industries, their own innovativeness, what contributes to innovation, what settings make them (more) innovative, how they develop new ideas and implement them, and whether and how they think innovativeness can be measured. We examined how these companies do assess the importance of co-location and the level of institutional involvement (thickness)

within their location, and to what extent context and organisation do play a role in their own experience of innovation practices within their working environment, both internal as well as external to their own business.

In the third stage, the Cultures of Innovation in the Creative Industries (CICI) Surveys focused on working in creative business centres, creative labour and entrepreneurship, place reputation and innovation. Again, we collaborated closely with the location managers. All entrepreneurs were sent an invitation to a survey with a cover letter explaining the topic and importance of the research project. In the locations, the entrepreneurs were notified about our study by the clusters' managers by email. The cooperation with DCRN and the managers/administrators of our research locations was essential to data collection and the progress of the research. They provided access to the creative companies that we researched and provided logistical support. Thanks to the smooth cooperation, we were able to collect voluminous and rich data from creative companies. Another result of the collaboration is that the locations concerned better understood their tenants, how they appreciate the locations but also any problems they experience. The managers were also provided with a private report of our findings particular to their location.

The CICI research yielded a number of tangible findings (see also Wijngaarden et al., 2016; Bhansing et al., 2018, Wijngaarden et al., 2019). Creative Business Centres (CBCs) are used by creative entrepreneurs to show that they are risk-taking, innovative and artistic; it reinforces their identity as a creative entrepreneur. CBCs are also used by creative entrepreneurs for its creative and professional reputation. When co-located, creative entrepreneurs appreciate the sense of collegiality with other entrepreneurs. Creative entrepreneurs find that they innovate because they are involved in a continuous recombination of new and existing elements of already existing products and services. Sources of innovations of creative entrepreneurs are the atmosphere of the location, the passion for their work, and contacts with peers and partners.

CBC managers experience a lack of continuity and a high degree of volatility in finances, management and ownership. Creative entrepreneurs appreciate co-location in one building or complex, but would like more advice and support from the management of the property. The findings of the CICI research project can be summarised in three main conclusions on the value of creative business co-location for entrepreneurs. Firstly, the hub provides a context that stimulates the creative entrepreneur in the development of products and services. Secondly, it gives the creative entrepreneur the chance to show them who he/she is. And thirdly, creative business hubs are essential for a functioning ecosystem of the cultural and creative industry. It is necessary that there are affordable workplaces for starting and growing creative entrepreneurs. However, there is a risk that developing a sustainable creative industry through creative co-location can fall prey to the growing opportunities of economic exploitation of the properties involved. Managers running creative business hubs would gain from a continuity strategy in which one takes account of any possible displacement to other locations.

A bottleneck in the cooperation with our partners was the uncertain policy and market environment in which they operate, as well as the rapid individual mutations that took place at these organisations. In seven cases there were financial difficulties to the owner/administrator, in two cases the locations were sold to other owners and the management organisation the changed at four other locations. In six cases there were significantly less intensive programmes for tenants and in eight cases there were individual changes in the management. As researchers

we sometimes encountered problems with the continuity of our research, which also has led to some delay in the data collection.

Knowledge Dissemination and Utilisation

The CICI project set out to answer questions about the impact and effectiveness of the co-location and agglomeration of creative industries. What happens in creative business hubs and complexes; how are they managed; how is a culture of innovation fostered; and what kind of innovative outcomes are experienced? From the outset, the research was targeted at not only generating academic knowledge and contributing to debates on the effectiveness of clustering and co-location, it was also set up in close collaboration with industry partners and aimed to generate applicable knowledge for the sector. Especially the management of the locations were able to apply this knowledge to improve the quality of their facilities.

The findings were shared with the users and the broader field in a number of dissemination activities. There were three types of activities. First, in close cooperation with our partners, we organised several conferences and expert meetings. The CICI research team has disseminated its findings from the onset onwards at different times, during meetings such as DCRN Board meetings and meetings of its International Advisory Board. A broader audience was reached during DCRN's Knowledge Days, which were specifically aimed at disseminating knowledge and knowledge sharing among members of the network. We participated in those meeting on several occasions. The linkages that we established with DCRN proved to be very conducive to the utilisation of knowledge. Our scientific research provided important insights for improvement of the positive effects of co-location of creative industries. At the conference 'Science meets Creativity', hosted at Strijp-S in Eindhoven in 2014, the most current research and successful practical cases were presented and discussed. Here, researchers, managers and entrepreneurs shared their insights and experiences, and discussed on the topic of what science and creative co-location buildings had to offer each other. The input of the location managers during the first seminar had a formative influence on the CICI research.

At the larger CICI project conference 'The place to be', we targeted managers, entrepreneurs, policy makers and academics. It took place in year 3 of the project at The Creative Factory, Rotterdam. We presented a mid-term report of the project results to a broader group of users. In addition to the presentation of results, the conference offered dedicated workshops for policy makers and managers, where we looked at possible applications of relevant themes. Also the (interviewed) entrepreneurs from different locations could share insights with each other through workshops around the theme of entrepreneurship in creative co-location centres. A closing expert meeting 'Here to stay! Business Continuity Strategies for Creative Hubs' was organised in year 5 of the CICI project. We targeted an audience of CBC managers, interested creative entrepreneurs and policy makers. It was hosted by one of the DCRN members, De Kroon, Rotterdam. Following the conclusions of the CICI research we discussed business continuity strategies for creative hubs. Now the real estate market has picked up steam again, formerly obsolete urban areas, which housed many creative industries hubs, became subject to urban development and gentrification. One of the conclusions of the CICI research was that in this dynamic creative hubs – whether or not they were (temporarily) established in times of crisis – often lose out. The participants jointly

formulated starting points to increase the continuity strategy of hubs. In that way, they directly translated the conclusions of the CICI research into concrete plans of action.

Second, a website was developed for knowledge dissemination. During year 1 we prepared and went live with our project website: www.ciciproject.nl. On this website we presented (short) information about CICI research: the main questions and approaches, and we shared the findings of sub-projects, we introduced the researchers involved as well as our partners. In addition, the website was regularly updated with news about the progress and events. The website was increasingly used to disseminate knowledge. Working papers, presentations, reports and the final conclusions were presented through the website to the partners, users and the general public.

A third set of dissemination activities were our publications and reports. Of interest here are our professional and general publications in which we translated our research findings to the users, managers, policy makers and the general audience. A mid-term report was prepared in year 3 and already included many of our most important findings. The final report of the CICI project examined the relationship between creative business centres and innovation, answering our research question. It sets out the conditions and catalysts of innovation which were found in the research, and what factors can limit or obstruct innovation. It focused on a number of themes, including: the specificity of creative entrepreneurship, the sources of innovation, the reputation of the building, social interactions, the needs of entrepreneurs, the role of managers and intermediaries, relationships with education and governments. The project also reported specific feedback to locations, targeted at managers of the participating locations. These reports for each location offered a concise reporting of results of interviews and surveys of the entrepreneurs, specifying the characteristics of and programmes within the CBC that were appreciated, which thresholds were experienced by entrepreneurs and which improvements could be made. Where possible, we also included statements and evidence on the contribution of the CBC to innovation. Of course, the anonymity of respondents was guaranteed and results could not be traced back to individual renters.

Overall, throughout the five-year project, we have actively collected and shared our acquired knowledge about creative entrepreneurs and the innovative effects of their co-location with professionals in the creative industry. The research has had an important role in demonstrating the added value of creative co-location, and in that way contributed to the legitimation of fostering – and publicly supporting – breeding places for emerging creative entrepreneurs and small businesses.

Conclusions and Discussion

As we have argued elsewhere (Wijngaarden et al., 2016), innovation is best understood by taking a holistic view, including its conditions and outcomes. It is a process or a by-product of one that is more than creativity or successful implementations of novel ideas or products. Innovation as a process is about openness to the environment and utilising or creating new methods that increase or deliver high-quality outputs. Our perspective places less emphasis on the market and societal acceptance. In our view, innovation should be considered a field-specific process that has value in specific contexts and locations and takes different shapes in different locations. This allows an introspective view on the creative industries, and thereby a

better way of understanding innovation in this particular context. Moreover, it shows that many innovations are produced out of the motivations to make beautiful, meaningful and useful products and services, but also that these innovations are shaped and created by their localities (Wijngaarden et al., 2016, p. 10). This way the project fits within the media clusters research available in media management literature.

In terms of the SIVC models of Van der Burgwal et al. (2018), in the early and preparatory stages of our research, we carefully assessed the needs of the sector and subsequently in close relationship to our partners, articulated the demands for research. The identified demands were translated into the objectives for our research, based, among other things, upon the necessity of new knowledge development versus the availability of already developed knowledge. The assessment of needs and the articulation of demands took place within the research agenda-setting of the government-funded Topsector Creative Industry and the CI Next Business Innovation Network. For the analysis of subsequent stages of our research, the SIVC model is less useful as it takes a different route of knowledge transfer towards commercial development and market deployment. For us, knowledge dissemination and utilisation were central to our concerns.

While our results address the effectiveness of and challenges to co-located business centres, the question remains to what extent and in what way entrepreneurs, managers and policymakers can make use of the results. Landry et al. (2001) convincingly argue that knowledge dissemination efforts and adaptation of research products have positive effects on knowledge utilisation. They depend on the interaction between researchers and users as well as the linkage mechanisms that they have invested resources in. However, factors regarding the users' context are contingent to the particular situations of the users and, as a consequence, are difficult to include in a generalised theory of knowledge utilisation. Our experiences corroborate these statements. Our interactions with our partner locations and DCRN have been very important in the way that the results of our research have been taken up in the daily practice of the location managers. The dissemination activities that we have organised and our participation in meetings have had varying degrees of effects on the uptake of the research results. Not all users were similarly interested in these results, as some had to prioritise more pressing issues concerning the management and financial situation of their location. Interestingly, we also clearly observed the non-linearity of this process. Utilisation of knowledge did not have to wait until the research was finished, even more so, it started almost immediately as we initiated our research on these locations. The mere fact that we were doing our research, talking to the managers and entrepreneurs and focusing their attention on their role as intermediaries, raised their awareness of the practice of innovation, the social and relational nature of it and the dependency on the proximity of codified and tacit knowledge.

Acknowledgements

This work was supported by the Dutch Research Council (NWO) under file number 314-99-110, and is made possible with the cooperation of the Dutch Creative Residency Network. Many thanks to Pawan Bhansing, Sven-Ove Horst and Yosha Wijngaarden for their contributions to this chapter.

References

Amabile, T. M. (1997). Entrepreneurial creativity through motivational synergy. *The Journal of Creative Behavior*, 31(1), 18–26.

Bathelt, H. & Cohendet, P. (2014). The creation of knowledge: Local building, global accessing and economic development – towards an agenda. *Journal of Economic Geography*, 14 (5), 869–882.

Bhansing, P. V., Hitters, E. & Wijngaarden, Y. (2018). Passion inspires: Motivations of creative entrepreneurs in creative business centres in the Netherlands. *The Journal of Entrepreneurship*, 27(1), 1–24.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

Cairncross, F. (1997). *The death of distance*. Boston, MA: Harvard Business School Press.

Cunningham, S. (2013). *Hidden innovation: Policy, industry and the creative sector*. St. Lucia: University of Queensland Press.

Currid, E. (2007). How art and culture happen in New York: Implications for urban economic development. *Journal of the American Planning Association*, 73(4), 454–467.

Davis, C. H., Creutzberg, T. & Arthurs, D. (2009). Applying an innovation cluster framework to a creative industry: The case of screen-based media in Ontario. *Innovation*, 11(2), 201–214.

De Vaan, M., Stark, D. & Vedres, B. (2015). Game changer: The topology of creativity. *American Journal of Sociology*, 120(4), 1144–1194.

Department of Culture, Media and Sport. (2011). *Creative industries economic estimates: Full statistical release*. London: Department of Culture, Media and Sport.

Ibrus, I. (Ed.). (2019). *Emergence of cross-innovation systems: Audiovisual industries co-innovating with education, health care and tourism*. Bingley: Emerald Publishing.

Karlsson, C. & Picard, R. G. (Eds.). (2013). *Media clusters: Spatial agglomeration and content capabilities*. Northampton, MA: Edward Elgar Publishing.

Komorowski, M. (2017). A novel typology of media clusters. *European Planning Studies*, 25(8), 1334–1356.

Landry, R., Amara, N. & Lamari, M. (2001). Utilization of social science research knowledge in Canada. *Research Policy*, 30(2), 333–349.

Markusen, A. (1996). Sticky places in slippery space: A typology of industrial districts. *Economic Geography*, 72(3), 293–313.

NWO. (2012). Creative industries top sector creative industries NeXt: Creative business innovation. Appendix to call for projects. Retrieved from: www.nwo.nl/binaries/content/documents/nwo-en/common/documentation/application/nwo/top-grants-social-sciences – -creative-industies-bussiness-innovations.

Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic Development Quarterly*, 14(1), 15–34.

Potts, J., Cunningham, S., Hartley, J. & Ormerod, P. (2008). Social network markets: A new definition of the creative industries. *Journal of Cultural Economics*, 32(3), 167–185.

Pratt, A. C. (2008). Cultural commodity chains, cultural clusters, or cultural production chains? *Growth and Change*, 39(1), 95–103.

Pratt, A. C. & Jeffcutt, P. (2009). Creativity, innovation and the cultural economy: Snake oil for the twenty-first century. In A. C. Pratt & P. Jeffcutt (Eds.), *Creativity, innovation, and the cultural economy* (pp. 3–19). London: Routledge.

Strauss, A. L. & Corbin, J. N. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.

Van de Burgwal, L., van der Waal, M. & Claassen, E. (2018). *Leveraging academic knowledge in the innovation ecosystem*. Rotterdam: SMO.

Van den Nieuwboer, M., Van De Burgwal, L. H. M. & Claassen, E. (2016). A quantitative key-opinion-leader analysis of innovation barriers in probiotic research and development: Valorisation and improving the tech transfer cycle. *PharmaNutrition*, 4(1), 9–18.

Van Geenhuizen, M. (2010). Valorisation of knowledge: preliminary results on valorization paths and obstacles in bringing university knowledge to market. Presented at the Eighteenth annual high technology small firms conference, University of Twente, Enschede, the Netherlands, 27–28 May 2010.

Virta, S. & Lowe, G. F. (2017). Integrating media clusters and value networks: Insights for management theory and research from a case study of Mediapolis in Finland. *Journal of Management & Organization*, 23(1), 2–21.

Wijngaarden, Y., Hitters, E. & Bhansing, P. V. (2016). 'Innovation is a dirty word': Contesting innovation in the creative industries. *International Journal of Cultural Policy*, 23(2), 1–14.

Wijngaarden Y., E. Hitters & Bhansing P. V.. (2019). Close to the local cool: Creative place reputation in Dutch 'ordinary cities'. *Creative Industries Journal*, 12(1), 86–104.