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Developing a self-assessment tool for the value creation of creative hotspots

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1. Introduction

Nowadays, it becomes even more apparent how cities and local communities are following the spirit of time. Emerging trends and recent developments, for instance the increasing digitalization in all aspects of life, are continuously reflected in local transition processes. These processes led by innovation and creativity are becoming fundamental for the creation of livelihood and the steady improvement of life quality within local communities (Kourtit, Nijkamp, & Partridge, 2013). Policymakers consider creativity as a key resource to compete in the so-called global knowledge economy (Evans, 2009). Therefore, it is not surprising that

urban policymaking and planning predominantly focus on promoting physical and social environments that foster the emergence of creative communities in order to stimulate value adding economic activity and the regeneration of certain urban areas (Franqueira, 2009).

In this context, one repeatedly encounters so-called creative hotspots. In fact, creative hotspots are said to be important drivers of social exchange, the development of communities as well as of art and culture. Ultimately, these hotspots spur innovation and economic growth (Kourtit, Nijkamp, Lowik, van Vught, & Vulto, 2011). So far, however, there is no consistent understanding of what a creative hotspot actually is and how it creates value. Thus, the motivation of this report is twofold.

In order to answer the problem statements at hand, this report is structured as follows. First, given the ambiguity surrounding the existing understanding of creative hotspots a more consistent definition is proposed. Second, this report develops the value contribution chain model (VCC) that defines the core components of value creation (i.e. inputs, activities and outputs) and identifies the preconditions, productivity and success factors that determine a sustainable creative hotspot. Third, the core value positioning tool (CVP) is introduced as a method to analyze the value creation dimensions of creative hotspots. Fourth, the VCC links the aforementioned core components and moderators to the social, economic, environmental, and cultural values contributed in order to derive a holistic view of sustainable value creation. Finally, limitations and implications of this analysis are discussed and conclusions are drawn.

2. Definition of Creative Hotspots

Academic literature on creative hotspots is still in its infancy. Definitions provided are inconsistent and ambiguous. For instance, Kourtit et al. (2011) investigated crucial aspects of creative hotspots. According to the author's, creative hotspots are network configurations or regional innovation clusters that contribute through a cooperation with many stakeholders to the valorization of business and knowledge, which goes beyond the conventional economies of scale and scope in that given configuration. However, the authors do not specify the proposed value contribution of creative hotspots. Furthermore, Kourtit et al. (2011) consider creative hotspots as strategic vehicles for the achievement of cooperation and synergy in regional development policy. According to Franqueira (2009), creative hotspots are an emerging form of urban spaces in which creative activities in the fields of art and culture, economy and production, social services and urban regeneration are pursued.

Whilst the existing literature is mostly inconclusive, scholars emphasize the role of location or geographic proximity, social networks or stakeholders as well as creativity or innovation.

The following definition of a creative hotspot is adopted throughout this report:

A creative hotspot is a physical location in a specific region or city that connects diverse stakeholders in a network configuration, functioning as a social hub that through collaborative activities fosters creativity and innovation, creates value and synergies.

This definition integrates these elements and provides a consistent overview of what a creative hotspot is. Next, the VCC is introduced and analysed.

3. The Value Creation Chain Model

As the aforementioned definition has demonstrated, creative hotspots foster creativity and innovation and create value and synergies through collaborative action. However, many of these value contributions are intangible and may not necessarily be captured by the hotspot itself, but rather, by its stakeholders. Consequently, creative hotspots frequently struggle to evaluate them. The purpose of this model is thus to prove creative hotspots with a tool that allows the assessment and measurement of sustainable value creation. Furthermore, consistent with the second problem statement, the model aims to identify the relevant and necessary preconditions and success factors that enhance the value that is created by the creative hotspot.

Unlike traditional tools that measure the economic impact or costs and benefits (Weisbrod & Weisbrod, 1997), the results chain or logic model provides a conceptual framework that allows a more holistic approach towards value creation (Ebrahim & Rangan, 2014). Originally developed for the United States Agency for International Development (USAID), logic models have emerged as a primary tool for social impact measurement and are widely adopted today (Ebrahim & Rangan, 2014).
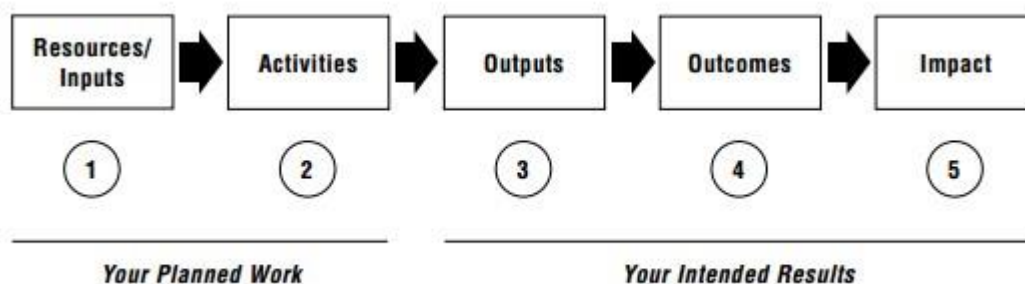
Figure 1: Basic Logic Model as suggested by the W.K. Kellogg Foundation (2004)

The W.K. Kellogg Foundation (2004) provides extensive information on how to adopt and develop logic models in order to connect the inputs to the value they create and thus to evaluate both the efficiency and effectiveness of activities. In contrast to the basic logic model, as suggested by the W.K. Kellogg Foundation (figure 1), this analysis adopts a more sophisticated version that includes numerous adjustments in both terminology and connections (figure 2).
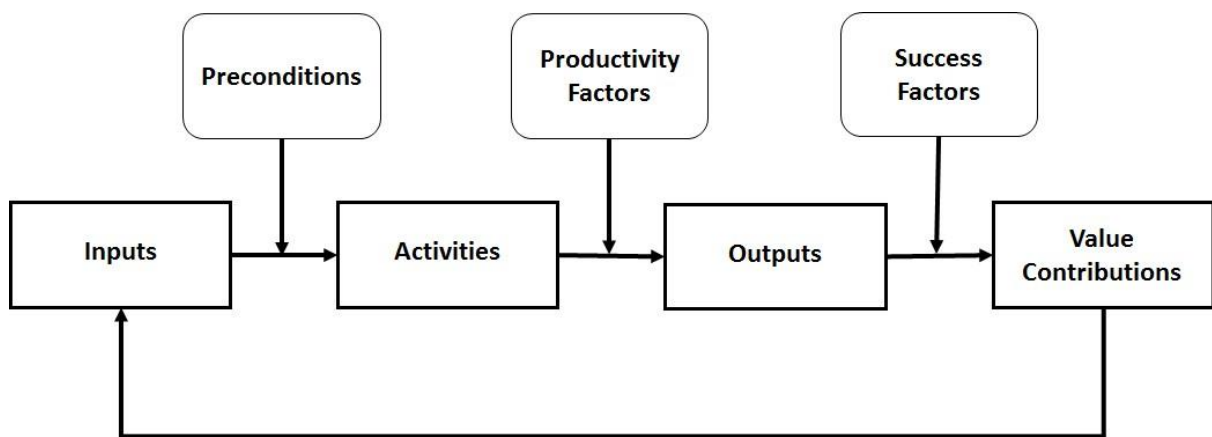

Figure 2: Logic Model for Creative Hotspots

These additions are a result of our research, which reflect the unique conditions and relationships of creative hotspots. For example, a core addition of our model is the moderating influence of preconditions and success factors in the problem statement. Moreover, a relationship between value contributions and inputs is included. This implies that the model is circular as the values contributed affect the availability of inputs. Indeed, it seems intuitive that hotspots that are more successful than others at producing and measuring value will be able to obtain more inputs. Next, the core components and moderating factors are defined.

3.1 Core Components

Inputs

Starting with inputs the model distinguishes between enabling and limiting resources, which for instance may include funding, staff, time, facilities, equipment, supplies and locations (W.K. Kellogg Foundation, 2004). Thus, inputs represent all of the resources, which the hotspot controls and of which it can make use of to carry out its desired activities.

Activities

If the entity has the resources it needs, it is able to pursue a certain activity. These activities can be broadly categorized into production and service activities. For instance, production activities could encompass manufacturing, customization, recycling or installation. Service activities may include workshops, exhibitions, vernissages, fairs or guided tours.

Outputs

The activities generate outputs, which describe the size and/or scope of the services delivered and products created as well as who benefitted from them. This is captured by the outputs, which translate activities into quantitative measure. Thus, outputs may refer to the number of workshops given, products manufactured, exhibitions held or participated in for example. This quantification allows the hotspot to confirm the goals it formulated for the services or products it delivered and created.

Value contribution

While outputs inform the management of a creative hotspot in quantitative terms about scale and scope of its organizational activities, they provide very little information about the impact or value that these activities ultimately contribute to internal and external stakeholders. Thus, an extra level of analysis, value contribution, is added. It captures the tangible and intangible results, which the creative hotspot is able to create, and reflects long lasting "improvements" at the individual, organizational and societal level.

Hart (2015) acknowledges that sustainability, due to its ambiguity, is frequently ill understood by academics and practitioners alike. Initially, sustainable development was defined as a "development which meets the needs of the present without compromising the ability of future generations to meet their own needs."(United Nations, 1987). Building on this first definition of the concept, sustainability is used to designate activities generating to the same extent economic, ecological and social value. Academic literature typically associates sustainability with holistic benefits to economy, society, and environment (Hart 2015, Tilley & Young, 2009). However, Dessein, Soini, Fairclough & Horlings (2015) assert that culture can have a supportive and self-promoting role on sustainability as well. Thus, the model adopts culture as a fourth value contribution to sustainability alongside economic, social and environmental considerations. In fact, culture strongly guides human decisions and actions. Therefore, the cultural output of a creative hotspot can support and promote sustainability. Hence, by adopting a holistic view on value contributions, these improvements may or may not be directly measurable. This can be in terms of economic value or reflected in changes in the knowledge,

skills, attitudes or behaviours of individuals, the capabilities, processes and resources of the organization, or the aggregate livelihood of the community.

After the core components - inputs, activities, outputs - for sustainable value contribution, moderators are identified. Moderators - preconditions, productivity and success factors - are factors enhancing or hindering the basic sequence of value creation. These include the context in which the hotspots evolve, the attitudes and processes adopted by members, and the collaboration with stakeholders. Because these dynamics can generate benefits in multiple stages, certain productivity factors can also be success factors and the other way around. The following part defines these concepts. An extensive descriptive index of preconditions, productivity factors and success factors can be found in the appendix (Appendix D).

3.2 Moderating Factors

Preconditions

In this model, preconditions relate to the all-underlying conditions in which the hotspot conducts its activities. These factors either can positively or negatively influence the hotspot's ability to transform inputs into activities. Important to note is, however, that these preconditions are dispositions that can lay outside the hotspot's direct control. Thus, a distinction between inputs, which the hotspot can directly control and preconditions, which mainly lie beyond its direct sphere of influence, is made. Preconditions can encompass the availability of volunteers, the predefined need for a physical location or the existence of policies, laws and regulations.

For example, a creative hotspot can directly control how it wants to integrate volunteers in its activities but it cannot directly influence the number of people willing to volunteer for its organization. Therefore, even though volunteers are considered an input, the availability of volunteers can represent another precondition.

Productivity factors

Again, the model recognizes that 'productivity factors' can have an impact on the hotspot's ability to maximize the generation of outputs out of its activities.

Productivity factors have an influence on the quantity of the products and services manufactured and delivered by the hotspot. This influence can be positive or negative. It is also possible that productivity factors have both a negative influence on the quantity produced and a positive one on the quality of the production at the same time. Productivity factors may include internal

practices of the hotspot such as recycling, using volunteers and improvising as well as the nature of the undergoing internal and external collaborations. The nature of a creative hotspot, in particular, its ability to create synergies between entrepreneurs with complementary skills, results in an organizational dynamic that can enable it to create a value, which extends beyond the value that each individual entrepreneur could generate.

Success factors

The success factors of a hotspot are the elements that enable the organisation to achieve its objectives and transform its outputs into value contributions. Success factors can be linked to attitudes, partnerships and external factors having an effect on the reach by broadening and deepening the targeted audience of the hotspot. Depending on the audience pursued by the hotspot, different success factors can be considered important in the pursuit of the creative hotspot's goals. Again, the transformation of outputs into values may be enhanced by a set of stimulating dynamics such as the collaboration with local entities, the attractiveness of the area among others. Success factors can also be an internal organizational culture that enables proactive collaboration and space for growth. This is critically linked to the member base of the hotspot.

3.3 Benefits of the Value Contribution Chain Model

Adopting this model as a tool for sustainable value creation has a number of benefits. First, from the perspective of stakeholders, it enables them to hold the hotspot accountable for the resources (inputs) they have entrusted to it. Second, from the perspective of the hotspot, demonstrating outputs allows it to encourage continuous stakeholder engagement and investment. Third, by rigorously analysing the relationship between inputs, activities and outputs, the hotspot gains a better understanding on how it creates value. This in turn will allow the creative hotspot to identify and increase the value it creates. Ultimately, the entire hotspot network can professionalize and realize its full potential. In order to demonstrate accountability to organizational stakeholders it is important to distinguish between intended and unintended contributed values. Only if the creation of value is intended, the value creation framework can assert that the creative hotspot made a substantial contribution to the desired improvement. Therefore, it is crucial for a creative hotspot to define the entire value it intends to contribute in a specific, measurable, achievable, realistic and timely (s.m.a.r.t., in the following SMART) manner in order to successfully create value. Finally, a creative hotspot that is able to demonstrate its value contribution in such a SMART manner, will be able to increase

stakeholder support and thus increase the availability of enabling inputs while at the same time decreasing the influence of limiting factors.

4. Core Value Positioning Tool

In addition to the VCC, a Core Value Positioning tool is developed. The CVP tool can be used by the creative hotspot to self-assess its position on the following four dimensions: economic, social, environmental and cultural. As mentioned above, these dimensions capture the value contributions of a hotspot, which go beyond the boundaries of the hotspot itself.
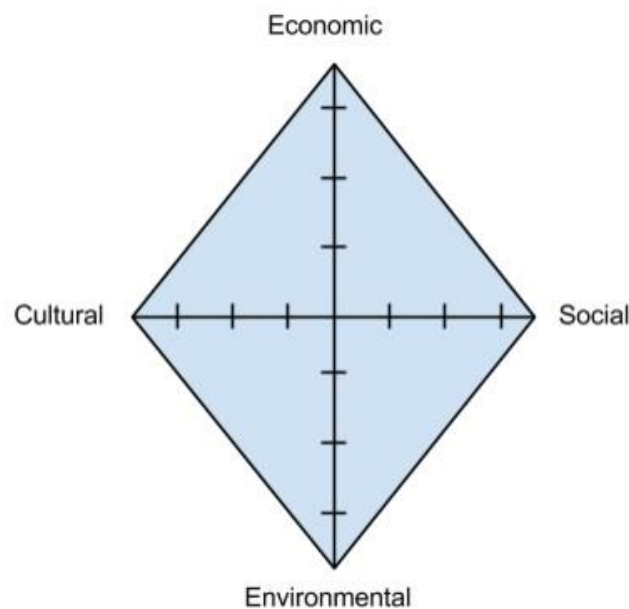

Figure 3: The Core Value Positioning Tool

The CVP tool can be used by the hotspot to visualise its position in terms of each dimension of value creation. Furthermore, it is a simple and useful tool to assess the performance of a creative hotspot and to follow the evolution of this performance over time (Figure 3). For example, a creative hotspot may be positioned high on the environmental dimension but wants to achieve a higher position on the cultural dimension. The CVP tool creates an easy way to assess what could be improved. Thus, the hotspot gains a clearer understanding of its strengths and weaknesses as the CVP tool creates an easy way to assess how well the hotspot has been performing in reaching its economics, social, environmental and cultural objectives.

The assessment statements of the CVP tool are formulated based on the VCC model. Every dimension has five statements, to which each a maximum score of five is assigned (Appendix

B). Thus, the hotspot reflects on its performance and objectives in pursuing the four types of contribution by answering the 20 statements. The next step for the hotspot is then to estimate its performance by using the tools provided to understand if the performance is line with the pre-formulated goals. Furthermore, it is important to note that there is no ideal score for a hotspot. The creative hotspot is free to formulate its intended value contribution based on its goals and objectives. The score is a means to increase the performance on a dimension and to identify future opportunities. The next section elaborates on the four dimensions. Detailed guidelines are found in the appendix for all dimensions and the statements with suggested interpretations (Appendix B).

4.1 The Economic Dimension

It is important to measure if and to what extent the creative hotspot's products and services make an economic contribution. The following statements take into account the progress in the remuneration of hotspots, their members and the economic value created for society-at-large.

Creative hotspots can generate profits with their products and/or services. This section measures the financial benefits members achieve through the sales of products and services. The hotspots can measure their profitability by surveying their members about their income satisfaction. Because in many cases the objective of creative hotspots is not profit maximization but rather financial security. The hotspot can alternatively consider the financial independence of its members as a reasonable proxy. *(1) Members of the hotspot are financially satisfied.*

The collaboration with other local businesses in the local area, for example, through exhibitions, workshops and other activities can increase the creative hotspot's profitability. This category focuses on the frequency with which creative hotspots collaborate with other local businesses. This can be measured by creating a stakeholder map between the organizations the creative hotspot collaborates with. Subsequently, the perceived economic value attached to the collaboration can be determined. *(2) The creative hotspot cooperates with local businesses.* Creative hotspots achieve a certain quality in their products/services that is considered valuable and meets customers' expectations. It is important for creative hotspots to assess whether the quality of their products/services has changed, for example, by surveying customers or participants. *(3) The quality of the product/service has improved.*

An increase in sales of products/services indicates a better economic performance. Moreover, a wider customer base assures robustness and stability as well as a well-balanced value

distribution. The hotspot can simply track and report monthly sales and customer data. *(4) The number of customers and/or sales has increased.*

Apart from the economic value that directly affects stakeholders, the creative hotspot can also contribute indirect value. This value is captured by the surrounding area, which may experience an increase in attractiveness or inhabitability. For example, local businesses might record an increase in sales or frequentation or landowners might have higher property values and lower costs for maintaining existing properties. *(5) The economic value of the area has increased.*

4.2 The Social Dimension

The creative hotspot is able to make a positive contribution to society through its activities.

The hotspot's social value contribution to its members is reflected in their state of social wellbeing as defined by Maslow's hierarchy of needs (Maslow, 1943;1972). This concept distinguishes between five levels of social needs from physiological and safety at the bottom, to love and sense of belongingness, esteem, and self-actualization at the top. *(1) The hotspot creates social well-being among its members.*

The second statement reflects on the connections with companies, organizations and individuals. The hotspot can create social cohesion by connecting different entities. The previously introduced stakeholder map (network analysis) allows an evaluation of the social links, which the hotspot established between different parties. *(2) The hotspot creates social cohesion by linking diverse individuals and entities through its network.*

Many creative hotspots engage in educational activities. For example, a creative hotspot may offer workshops, school visits, apprenticeships, lectures or debates. The number of people educated and the quality of the education provided are variables to consider in this context. *(3) Educational activities are organized regularly by the creative hotspot.*

A creative hotspot creates social connections between its stakeholders. By catering to refugees, long-term unemployed, people with disabilities, or others who are socially deprived, the hotspot can play an important role in their social integration and inclusion. The creative hotspot is a means for social services through inclusive activities and opportunities. *(4) The creative hotspot provides social services to a diverse public.*

A creative hotspot can also improve area livelihood through its activities. For example, the local population can benefit from and participate in the events organised by the hotspot. *(5) The social well-being of the people in the area has increased.*

4.3 The Environmental Dimension

Environmental sustainability can be another strategic objective for a creative hotspot. This can be achieved through sustainable practices that minimise environmental impact. Examples include the use of recycled materials, the creation of a circular business model, the optimization of energy consumption or the creation of increased environmental awareness among stakeholders. To assess whether the hotspot is performing well on the environmental dimension, five statements concerning the topic have to be answered.

Using recycled materials and/or waste is a way to act environmentally sustainable. The hotspot can utilize its network to source materials sustainably, and create a permanent inflow of resources. These various efforts could also entail using green energy sources, minimizing utilities usage and waste. The creative hotspot can survey members about their material use and sourcing practices. *(1) The inputs are sourced sustainably.*

The use of durable and reusable materials and tools reduces potential waste to a minimum and thus, can contribute to better environmental performance. The design and implementation of a circular business model is an important step towards sustainability. *(2) The outputs are environmentally sustainable.*

The creative hotspot can promote sustainable behaviour through its activities. Workshops, internships or lectures can transfer knowledge about sustainable practices. Another way to create awareness is to organize or participate in sustainability events or awareness campaigns. *(3) The hotspot promotes sustainable behaviour.*

The collaboration with entities that are recognized for sustainability may enable the hotspot to exchange valuable knowledge and practices. Another form of sustainable collaboration can be to donate or gather unused or recycled materials. This decreases cumulative waste and increases environmentally friendly inputs. *(4) The hotspot collaborates with sustainable entities.*

Finally, the creative hotspot's attitude towards and treatment of the local ecosystem adds to the environmental value it creates. Activities that are directed at the preservation and regeneration of resources, materials, buildings, and properties in its surrounding could be a means to achieve

this goal. Furthermore, the hotspots can also assess their waste management practices. *(5) The hotspot participates in the maintenance and/or regeneration of ecosystems.*

4.4 The Cultural Dimension

Finally, creative hotspots can host diverse types of cultural activities, which allow stakeholders to express themselves, and thus generate a wide range of cultural contributions.

The more culturally diverse the network configuration is, the better its ability to recognize cultural opportunities and voids. Moreover, a diverse member base amplifies their learning opportunities and collaboration benefits. *(1) The creative hotspot consists of members with diverse skillsets that are culturally relevant.*

A well-known and locally embedded hotspot is able to connect people as well as to share and promote culture. The network analysis provides a tool to visualize and measure the hotspot's local embeddedness. In addition, the backgrounds of participants, customers and visitors reflects the involvement of the local community. *(2) The creative hotspot is locally embedded.*

Furthermore, the creative hotspot can sell or provide products and/or services of cultural value. Due to its subjectivity, this cultural value is particularly difficult to assess. Possible dimensions may include the aesthetic, spiritual, historic, symbolic and authentic value of activities. *(3) The creative hotspot offers products/services that are of cultural value.*

Hotspots may aim to promote cultural activities within its network and can provide a breeding ground for other creatives. For example, the creative hotspot can sell their products, or allow them to advocate their services. To add numbers to the narrative, counting the number of exhibitions the hotspot participated in, and multiplying it times the number of external creative exhibitors, indicates the reach. *(4) The creative hotspot promotes cultural activities.*

By connecting different and diverse stakeholders, the hotspot spurs cultural development in the area. It is also important to see whether the hotspot focuses solely on one type of activity or if it connects multiple cultural needs. Conducting a network analysis helps to assess the hotspots cultural performance. *(5) The creative hotspot connects diverse entities.*

5. Integrating the Value Contribution Chain Model with the Core Value Positioning Tool

Separately, the two tools already provide organizations with a multitude of valuable insights. However, it is only their conjunction, which allows them to reach their full potential. Thus, it is most beneficial for the creative hotspot to combine them. This process takes three steps.

First, the creative hotspot needs to identify its current position on the CVP diamond for each of the four dimensions of economic, social, environmental and cultural fit. Hence, the hotspot can apply the five statements of each value identified above to self-assess its position.

The second step is to apply the VCC tool on each of the four sustainability dimensions (Figure 3). The VCC clarifies the relationship between the intended value contribution for each dimension and the activities that ought to be conducted. Furthermore, it enables the identification of the required inputs. Moreover, a clear understanding of the moderating factors that may affect the generation of value is developed. This allows the hotspot to identify a clear outline of which aspects are most important to monitor and which additional activities it may consider. Furthermore, it allows the creative hotspot to recognize and thus avoid problems that it may encounter on the along the way.
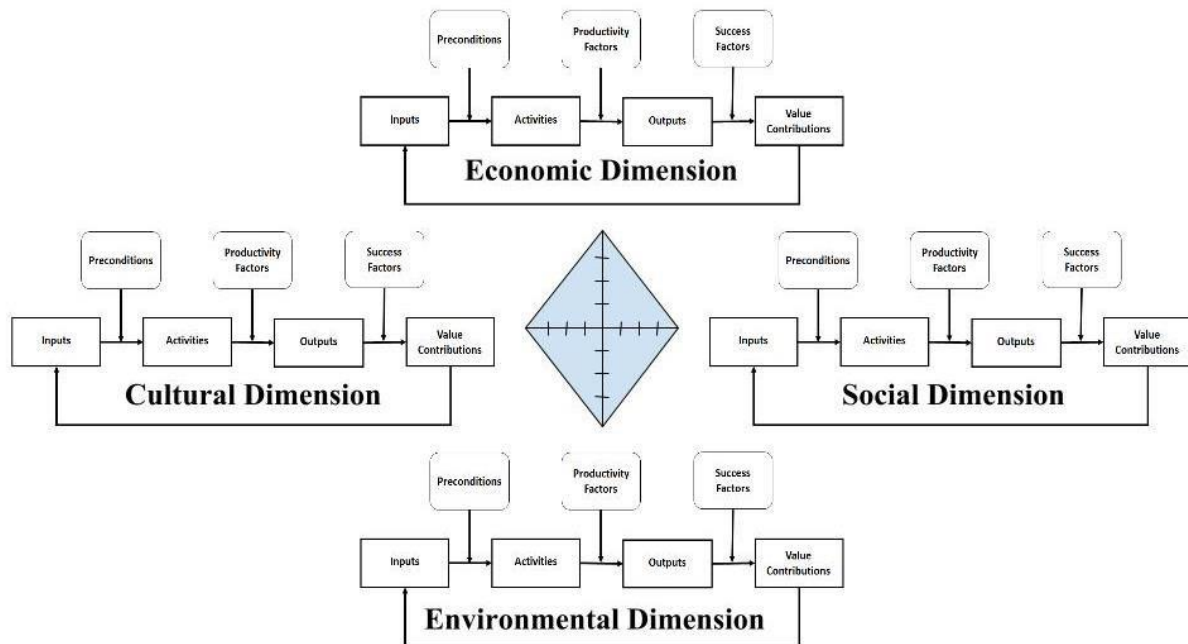
Figure 4: The Combined Value Contribution Chain and Core Value Proposition Model

Based on the insights gathered during the measurement process, the third step is to apply the VCC tool on each of the four sustainability dimensions. The VCC clarifies the relationship between the intended value contribution for each dimension and the activities that ought to be conducted. Furthermore, it enables the identification of the required inputs. Moreover, it is crucial at this point to develop a clear understanding of the preconditions, productivity factors and success factors that may influence the generation of value. For the hotspot, this step may seem to be complicated. Therefore, an index that specifies the nature and potential effects of each of these moderators can be found in the Appendix (Appendix D). The use of the VCC allows the hotspot to identify a clear purpose. This enables it to monitor existing and consider additional activities. Furthermore, challenges and problems can be avoided. Finally, it allows the hotspot to articulate its needs and thus elevate the dialogue with stakeholders.

Finally, the hotspot must re-evaluate the contributions of value by reapplying the three steps detailed above periodically by repositioning the hotspot along the four dimensions of the CVP diamond. By doing so, the hotspot can measure its progress and provide accountability to stakeholders. Annual re-evaluations appear to be most beneficial, since shorter periods would not allow to observe the changes taking place. Existing goals can be adjusted, refined or replaced with new goals. Thus, the combination of these tools provides a compelling method for the continuous improvement of sustainable value creation.

6. Limitations

Both the CVP tool and the VCC model are not without limitations. The models are based on an extensive literature review and structured interviews with multiple hotspots and their stakeholders in the region of Maastricht. However, both models might still omit important factors that can be crucial for some hotspots and are not catered for a specific hotspot. Thus, creative hotspots that want to use this method should always consider the unique conditions of their environment. In addition, the adaptation of a different definition of creative hotspot might also lead to the identification of different moderators and value contributions. Furthermore, a common fallacy among practitioners is to assume that activities are ends to themselves. Hence, they demonstrate impact by reporting the number of participants, products, or exhibitions and

treat them as if they were results. However, conducting an activity and measuring the outputs it generates is not the same as creating value from the accomplishment of that activity (W.K. Kellogg, 2014). It is therefore crucial that the VCC model is well understood before it is applied. Moreover, some statements may have to be altered to measure the baseline performance. For instance, it may be counterintuitive to ask whether product/service quality has improved if the hotspot assesses its quality for the first time with the CVP tool. In addition, users might find that they do not fit in the molds of the model and the tool. Under these circumstances, the hotspot may find that statements are irrelevant. To this end, the substitution of such statements for ones that provide a better fit may be considered. Evidently, hotspots need to be able to motivate the substitution of statements. This makes the CVP tool adaptable and customisable to different hotspots. Another limitation is the self-assessing nature of the models. A subjective and biased application reduces the accuracy and benefits of the model. The extensive guidelines and measurement tools provided in the Appendix (Appendix) decrease the impact of these negative effects. To further reduce the bias, hotspots are encouraged to work with external stakeholders during self-assessment. Furthermore, the engagement of a productive dialog with these stakeholders can significantly improve the defined value proposition. However, even if goals and value contributions are clearly defined and coordinated with stakeholders, one needs to be aware of potential causality concerns when attributing changes, especially at the macro level, completely to the value contributions of the hotspot.

7. Conclusion

This analysis proposes a definition that considers creative hotspots as physical locations in a specific region or city that connects diverse stakeholders. Moreover, this network configuration functions as a social hub that through collaborative activities fosters creativity and innovation, creates value and synergies. As the identification and measurement of value contributions is difficult, an integrated model (VCC and CVP) for the assessment of sustainable value creation is suggested. Through the development of these models a tool toward developing the accountability of such hubs is proposed. This tool aspires to encompass the complexity of the value created by entities fostering creativity while embracing the simplicity required for an effective application of the tool. The value contribution chain model illustrates the creation of value by following a 'chain' from inputs over activities and outputs to value contributions. Furthermore, the model considers several preconditions, productivity and success factors,

which may enhance or inhibit the transformation of inputs into value contributions throughout the chain. These value contributions are categorized along four dimensions, economic, social, environmental and cultural, which are recombined by the core value position model to determine the sustainability of the creative hotspot. The report then suggests five statements for each dimension that can aid the hotspot to depict its position on the CVP diamond. Appendix A contains implementation guidelines. Once the hotspots has established its position and assessed the value it contributes, it can formulate new objectives for the future. SMART goals represent relevant and comprehensible criteria that can guide the hotspots to set objectives along these dimensions and to communicate them with stakeholders. Thus, to conclude, with the derived consistent definition and the developed model this analysis has demonstrated how creative hotspots can generate sustainable value.

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Appendix

Appendix A: Self-Assessment Tool Appendix A1: Positioning on the Core Value Proposition Diagram

The first step of the self -assessment is to answer the five statements for each of the four dimension of the value contributed by the hotspot. These 20 statements in total can be answered on a scale from 1 to 5, 1 meaning a strong disagreement with the statement and a 5 a strong agreement. The statements presented in this case are suggestion and can be modified by the hotspot to better fit its objectives.

Economic Dimension

(1) Members of the hotspot are financially satisfied.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(2) The creative hotspot cooperates with local businesses

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(3) The quality of the product/service has improved.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(4) The number of customers and/or sales has increased.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(5) The economic value of the area has increased.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

Social Dimension

(1) *The hotspot creates social well-being among its members.*

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(2) *The hotspot creates social cohesion by linking diverse individuals and entities through its network.*

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(3) *Educational activities are organized regularly by the creative hotspot.*

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(4) *The creative hotspot provides social services to a diverse public.*

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(5) *The social well-being of the people in the area has increased.*

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

Environmental Dimension

(1) The inputs are sourced sustainably.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(2) The outputs are environmentally sustainable.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(3) The hotspot promotes sustainable behavior.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(4) The hotspot collaborates with sustainable entities.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(5) The hotspot participates in the maintenance and/or regeneration of ecosystems.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

Cultural Dimension

(1) The creative hotspot consists of members with diverse skillsets that are culturally relevant.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(2) The creative hotspot is locally embedded.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(3) The creative hotspot offers products/services that are of cultural value.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(4) The creative hotspot promotes cultural activities.

	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

(5) The creative hotspot connects diverse entities.

|	1	2	3	4	5	
Disagree Strongly	○	○	○	○	○	Agree Stongly

Appendix A.2: Completing the CVP

After answering the 20 statements, the hotspot can compare its performance in every dimension of contribution.

	Economic	Social	Environmental	Cultural
Statement 1				

Statement 2				
Statement 3				
Statement 4				
Statement 5				
Total				

To analyze its position on the CVP tool, the hotspot should fill out the table above. In the boxes the statements and measurements are written, together with the respective score reached on this item. The CVP can then be used as a base for the hotspot to visualize its orientation toward economic, social, environmental and cultural value creation. Conducting this study periodically is a way for the hotspot to observe how it has been able to improve its performance in specific dimensions.
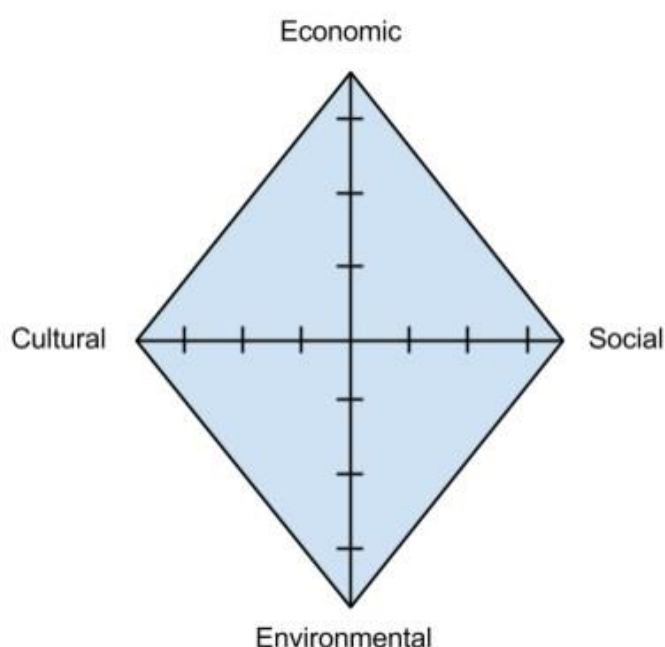
Appendix B: Measuring the Hotspot's Performance on every Dimension

This section presents a set of tools that enable the hotspot to connect the statements with specific answers. These tools are almost all meant to be used by the coordinators of the hotspot and may require additional external support as well. In terms of audience of the measuring tools proposed

here, some can be directly used by the coordinators while others may require the participation of members or visitors and participants.

Appendix B.1: Economic Value

Proposed guideline to answer the statements of the economic dimension.

Statement 1. Members of the hotspot are financially satisfied.

The first statement focuses on the satisfaction the members of the hotspot obtain through their income at the creative hotspot. This statement can be measured by looking at the net income of all members and subsequently determining their satisfaction on it.

	Member #1	Member #2	...
Do you have a job on the side of your activity in the hotspot?			
Do you depend of social benefits?			
Are you the only source of income in your household?			
Are you satisfied with your income at the hotspot?			

Statement 2. The creative hotspot cooperates with local businesses.

The second statement is based on the collaborations the creative hotspot has with the different local businesses. The following statement can be measured by determining all the local businesses the creative hotspot collaborates with and later estimate the number of collaborations.

Member	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10

1) How much of your supplies come from local partners?												
2) How many of your sales are products from other local businesses?												

Local business name	Number of collaborations	Strength of collaboration (1-5)
Total		

Statement 3. The quality of the product/service has improved.

The third statement focuses on the reassuring the quality of the product/service provided by the members of the creative hotspot. An after-sales/after-workshops survey can be handed over to the customers to measure their satisfaction.

Questions	Answers
From 1 to 10 how satisfied are you with the product/service provided.	
How would you improve the product/service?	

Statement 4. The number of customers and/or sales has increased.

The fourth statement is based on the increase or decrease of the products/services created by the members of the creative hotspot on a monthly basis. The quantity of produced products/services can be analysed by developing a monthly report.

Month	1	2	3	4	5	6	7	8	9	10	11	12
Units/Participants												

Statement 5. The economic value of the area has increased.

The fifth statement is difficult to assess for the hotspot. The local authority and landowners are in better position to make estimations in this regard, because they can observe the evolution of the land value. Insightful observations can be made by comparing the land value before and after the hotspot has been set up or before and after significant moments in the lifetime of the hotspot. Examples of significant moment in the lifetime of a hotspot include, increases in the effectives, renovations of the building and/or contribution to the surroundings.

Appendix B.2: Social Value

Proposed guideline to answer the statements of the social dimension.

Statement 1: The hotspot creates social well-being among its members.

The first statement shines light on how the members benefit socially from their presence in the hotspot. The social well-being of the hotspots members can be measured by evaluating their overall satisfaction in terms of social aspects. Well-being can also be measured based on Maslow's psychological and self-fulfillment needs.

| Question	1 (strongly disagree)	2	3	4	5 (strongly agree)
Has the hotspot provided you with a sense of belonging to a community?					
Would you say that your activities at the hotspot contributed have given you a feeling of accomplishment?					
Do you feel self-fulfilled from your activities in the hotspot?					

Statement 2: Local entities and organisations benefit from the creative hotspot.

The second statement measures how the hotspot creates social contributions through its network, and how it can establish links between individuals and organisations to improve the

chances of the individuals connected. The people benefiting from these new connections can be members of the hotspot but also people attending the workshops activities.

Measuring this can as easy as creating a list of all partners diving the partners into different categories such as cultural entities, business partners, financiers and educational entities. A hotspot with a diversified network of partners can connect its member, customers, participants and visitors to a wide array of specialities.

The next step for the hotspot is to generate a visualization of its network. This may be achieved by, first placing the hotspot in the center of the network and linking the entities to the hotspot. This can be done on a map or on a blank sheet. Different colors should be used to attest of the field in which the entities operates : culture, education, business, public institutions.

Created with NodeXL (http://nodexl.codeplex.com)
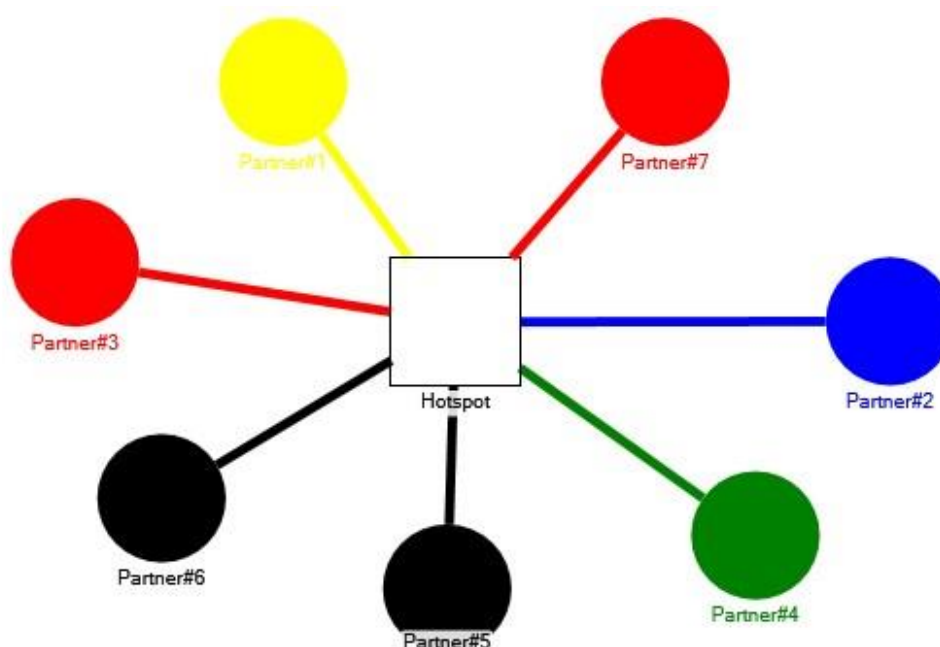
*In this case red refers to cultural partners, blue to educational, black to business partners and green represent public institutions.

Statement 3 Educational activities are organized regularly by the creative hotspot.

The third statement focuses on education as a social contribution. This can be measured by looking at the attendance of workshops & classes, number of school visits and the number of trainees hosted by the members of the hotspot.

	A = Number organised (year)	B = Min number of participants	C = Max number of participants	Yearly reach (=A*B)	Yearly reach (=A*C)

Frequentation of the Workshops & Classes					
Number of School/ University Visits					

Finally, the overall contribution of the hotspot in terms of education can be measured.

Number of Trainees	
+ Frequentation of the workshops & classes	
+ Students reached through school activities	
+ Number of trainees (low and high boundary are the same)	
= Total educational contribution	

Statement 4: The creative hotspot provides social services to a diverse public.

The fourth statement lends insights into the hotspots' role as a provider of social services. The hotspot orientation in serving and collaborating with refugees, people with disabilities, unemployed people and general interest workers during the hotspots' various activities. This orientation can be calculated by looking at the participation of these social groups in the different workshops, classes and activities and at the regular members of the hotspots fitting in these groups.

+ People with disabilities reached	
+ Unemployed people reached	
+ Refugees/migrants reached	
+ Other socially disadvantaged individuals reached	
= Total social services provided	

(5) The well-being of the people in the area has increased.

The contribution of the hotspot to the well-being of people visiting the area in which the hotspot is located cannot simply assessed by surveying the visitors of the area on their well-being. The methods used must be more complex because it is necessary to isolate the contribution of the hotspot from the contributions of other entities in the area. To achieve this, we suggest using anchoring points, which can be the arrival of the hotspot or major moments in the history of the hotspot (growth in number of members or activity, creation of landmarks in the close surroundings) and conducting a before-after study based on the selected moment. The change in behaviors, satisfaction and/or well-being observed can then be linked to the hotspot in a significant way (assuming that other key changes resulting from the action of other entities did not happen at the same moment). While the hotspot cannot conduct such extensive studies on every visitor of the area, digital subscribers to newsletter and social media pages can be used to spread digital survey. Below is one examples of survey that can be used by the hotspot or by external observers with the resources to survey the visitors of the area. This one looks at before after situation concerning reasons to visits the area.

	Leisure	Visiting building 1	Visiting building 2	Visiting building ...	Passing by	Work	Others	All of the above
Why did you visit the area **before** [anchor moment]								
Why did you visit the area **after** [anchor moment]								

The hotspot contributions can then be highlighted by an increase in the frequentation for leisure, which can also result in higher frequentation of the area. Inquire about the number of visits, on a monthly basis, in the survey. Here again, the before after comparison is the key.

	How many times a month did you visit the area **before** [anchor moment]
Visitor 1	
Visitor 2	
Visitor 3	
Visitor 4	

...	
Average	

	How many times a month did you visit the area **after** [anchor moment]
Visitor 1	
Visitor 2	
Visitor 3	
Visitor 4	
...	
Average	

Through these tools, the hotspot will be better able to communicate the specific contribution of the hotspot to its vicinity. Note: Combining the results of this question with the measurement of the fifth question of the economic dimension "*The economic value of the area has increased*" is a way to isolate the hotspot's contribution to the increase of the price of the land where it is located. As explained in the previous part, these measurements go beyond the sole capabilities of the hotspot and require the participation of bigger entities, the owner of the land and the municipality.

Appendix B.3 - Environmental Value

Proposed guideline to answer the statements regarding the environmental dimension questions.

(1) The inputs are sourced sustainably.

The fourth statement covers to what extent to inputs of the hotspot members are environmentally sustainable. This can be measured by determining the average percentage of recycled input used relative to the total amount of input of all members and how they acquired it. A questionnaire will have to be distributed to get these numbers of all members.

Statement 4: The inputs are sourced sustainably.

To evaluate the hotspot's environnemental orientation in sourcing its inputs, the average quantity of recycled materials used can be estimated by looking at the estimated percentage of recycled materials used by the members of the hotspot.

A survey can be completed by every members of the hotspot.

	0%-20%	20%-40%	40%-60%	60%-80%	80%-100%
Percentage of recycled materials used					
Member #1					
Member #2					
...					

Then, the provenance of the energy used in the hotspot can be assessed by looking at the provenance of the energy. Utilisation of renewable energy source and their percentage in the overall energy consumption of the hotspot can communicate it.

	Solar energy	Wind energy	Water energy	Other
Yes/No				
Percentage of total energy use				

Finally, the hotspot can assess the evolution of its energy consumption to evaluate the success of practices aiming at reducing the overall energy consumption in the building.

	Electricity	Water	Gas
A: Utility usage in a previous situation			
B: Current utilities usage			
$(A-B)/B =$ Change of usage in %			

Simply looking at the overall energy consumption of the hotspot cannot be used to observe the hotspot's environmental performance because many creative hotspots are located in poorly isolated building with bad energy efficiency.

Statement 2: The outputs are environmentally sustainable.

The fifth statement looks at the outputs and to what extent they are produced with sustainable materials. This can be measured by calculating the relative (in %) number of products made of durable and/or recyclable materials by all members of the hotspot. A questionnaire will have to be distributed to get these numbers of all members.

	Relative number of products made with recyclable materials (in %)	Relative number of products made with recyclable materials (in %)
Member 1		
Member 2		
Member 3		
...		
Total		

Statement 3: The hotspot promotes sustainable behavior.

The second statement concerns to what extent the hotspot makes an effort to promote sustainable behaviour among its member, visitors and other associates. This can be measured by looking at the number of workshops and lectures given concerning environmental sustainability and the average number of participants in each. Another measure is the number of events or campaigns that promote sustainability you have participated in or started.

	Sustainability workshops/lectures	Sustainability events
(Co)organized (Yes/No)		
Participants		

Statement 4: The hotspot collaborates with sustainable entities.

The fourth statement looks at the collaborations with other businesses, hotspots, charities, etc. it has regarding sustainable projects. This can be measured by looking at the number of collaborations with other businesses or entities regarding environmental sustainability during a year. In a first time, the number of collaboration for environmental matters can be measured by type of partner. Also, specify how the nature of this collaboration is sustainable, e.g. joint projects, workshops or events, exchange of knowledge or donating or receiving reusable spare materials/waste.

	Businesses	Charities	Other hotspots	Other entities
Number of collaborations (by type of partners)				

Collaborations can also be reorganised depending on the type collaboration, e.g. joint projects, workshops or events, exchange of knowledge, donations or receiving reusable spare materials/waste.

	Workshops/events	Exchange of knowledge	Donations of waste materials	Receiving waste materials
Number of collaborations (by type of collaborations)				

Statement 5: The hotspot maintain and/or regenerates ecosystems.

The hotspots' contribution to ecosystem can vary and may be difficult to measure by the board of the hotspots by commuting generic number applied to very different types of contributions to ecosystem.

For this reason, we here suggest that the hotspot communicates its contributions to ecosystems by detailing the different activities undertaken to:

- Preserve natural systems
- Regenerate and create natural ecosystems
- Reuse, repurpose unused buildings, lands and structure.

Appendix B.4: Cultural Value

Statement 1: The creative hotspot consists of culturally diverse members.

The diversity of the specialities present in the hotspot can be measured by listing the activities conducted within the hotspot.

Being precise on the type of activities and specialities (ex: wood craftsmen rather than craftsmen) is here important for the next step of these measurements.

List the activities present in the hotspot :

- …
- …
- …

After listing the activities present in the hotspot, the next step is to look at the collaboration potential this diversity creates. Indeed, a well thought diversity can look at the complementarity of each speciality to generate a greater cultural value through internal collaborations.

The hotspot can for example place all specialities on a blank sheet and draw linkages where the collaborations are currently happening. This tool can then be used to identify potential collaborating partners and worthwhile opportunities in its extended network. Furthermore, this tool will help the hotspot identifying which new specialities can be integrated to add the most value to the hotspot.

Statement 2: The creative hotspot products/services that are of cultural value.

The hotspot's offer in cultural services can be calculated by measuring frequentation of workshops & classes organized by the members of the hotspot can be estimated between two boundaries by using the table below:

	Number of workshops (year)	Min number of participants	Max number of participants	Number of workshop & classes *min number of workshops	Number of workshops & classes *max number of workshops
Frequentation of the workshops & classes					

The hotspot's offering of cultural product can be calculated by measuring the sales of the members. Sales can be communicated in economic value or in quantity of product sold, but must be consistent when measured with every members of the hotspot. Product sales in economic value. (services should not be included if they have been measured with the precedent table)

	Estimated monthly sales (in €)	Approximated yearly sales

Member #1		
Member #2		
...		
Total		

Or sales in quantity

	Estimated monthly sales (in quantity)	Approximated yearly sales
Member #1		
Member #2		
...		
Total		

The hotspot can choose between quantity and quality depending on the specificities of its activities.

Statement 2: The creative hotspot promotes arts.

The second statement focuses on promotion of arts at the location. First, the table used to measure the frequentation of workshops & classes in the previous statement must be used again.

	A = Number of workshops (year)	B = Min number of participants	C = Max number of participants	Yearly reach of workshops & classes, Low Boundary (=A*B)	Yearly reach of workshops & classes, High Boundary (=A*C)
Frequentation of the workshops & classes					

Then a similar table to the table can be used to measure the reach of exhibitions & fairs to which members of the hotspot take part.

	A = Number of exhibitions & fairs (year)	B = Min number of visits to each single exhibitions & fair	C = Max number of visits to each single exhibitions & fair	Yearly reach of exhibitions & fairs, Low boundary (=A*B)	Yearly reach of exhibitions & fairs, High boundary (=A*C)
Frequentation of the exhibitions & fairs					

Finally, the frequentation of the hotspot for other reasons that workshops or exhibitions must be measured. This may refer to the frequentation of a restaurant or shop in the hotspot, or to the visit of the building by external persons.

	Min number of visits in a month	Max number of visits in a month	Low boundary (=Min number of visits in a month * 12)	High boundary (=Min number of visits in a month * 12)
Frequentation of the hotspot				

Furthermore, to measure statement three one can look at the reach.

	Overall reach, Low boundary	Overall reach, High boundary
+ Frequentation of the workshops & classes		
+ Frequentation of the exhibitions & fairs		
+ Frequentation of the hotspot		
= Reach		

Note: number of visits & participants in all the above will include the same person multiple time! This is because we are looking at visits, not visitors.

Statement 4: The creative hotspot is locally embedded.

The fifth statement examines how the hotspot is imbedded locally. To measure this, the hotspot can conduct a study on the background of the different visitors in contact with it. To this end, population interacting with hotspot through its activities of can be asked to fill a survey where they could state their place of residence. This survey can take a physical form and be distributed to visitors and participants in cultural activities or be forwarded among the subscribers to social media page and newsletters.

Statement 5: The creative hotspot connects culturally diverse entities.

The fourth statement examines the connection of the hotspot with other culturally diverse entities. To this end, the network analysis used in the the second question of the Social dimension can be used again (*2) The hotspot creates social cohesion by linking diverse individuals and entities through its network.* The difference in this case is that the network analysis will be used to measure how the hotspot connects organisations rather than individual. The analysis can first look at the connection established between cultural entities, then at the connection established between the cultural sector and other fields. The analysis can first look at the connection established between cultural entities, then at the connection established between the cultural sector and other fields. Measuring this can be as easy as creating a list of all partners and dividing the partners into different categories such as cultural entities, business partners, financiers and educational entities. The next step for the hotspot is to generate a visualization of its network. This may be achieved by, first placing the hotspot in the center of the network and linking the entities to the hotspot. This can be done on a map or on a blank sheet. Different colors should be used to attest of the field in which the entities operates: culture, education, business, public institutions.
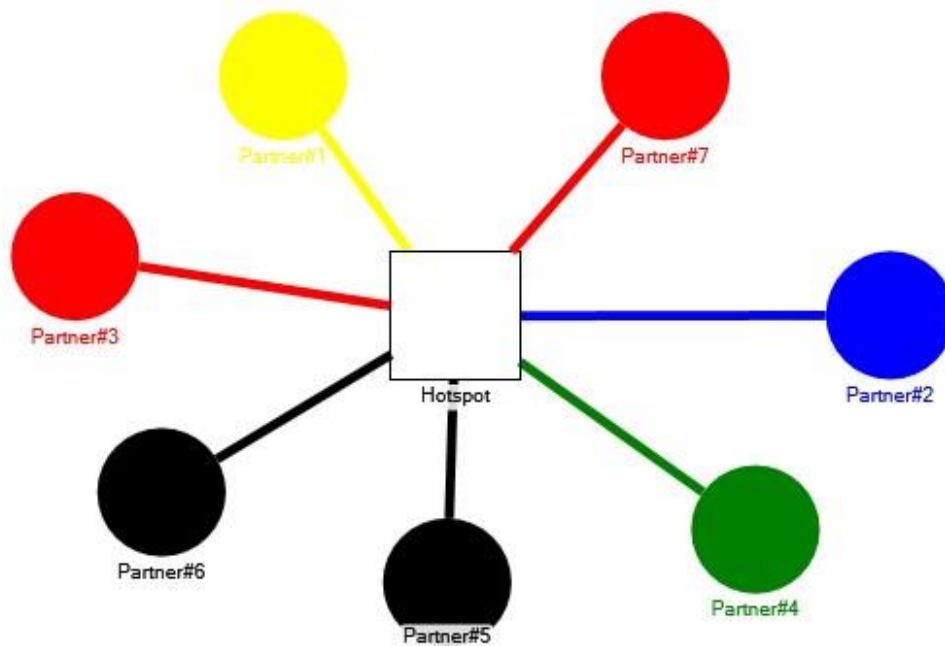
To create a network diagram:

1. Create a list of all the organizations and individuals partnering with the hotspot.
2. Subdivide the partners identified in the first step into four categories, these can be: cultural, educational and business organisations as well as public institutions for example. Assign a color to each of the categories, and reorder them. In case a partner falls into two categories, assign both colors to them and include them in both categories.

   3. Use tools such as NodeXL (https://nodexl.codeplex.com/) or Spiderbook (http://spiderbook.com/). To then organize the partners in a network diagram. Make sure that the partners have the correct color, that was assigned to them in the step above. In case a partner falls into two categories, create a dashed line that consists of both colors. Since NodeXl and similar tools can be quite challenging to use, additional research, for example through online material can help.

The analysis of the network can first look at the connection established between cultural entities, then at the connection established between the cultural sector and other fields.

Finally, the visualisation of the network analysis on a map can communicate important informations about the collaborations of the hotspot with surrounding organisations and how the hotspot can connect geographically distant organizations.

Network diagram visualized on a map:
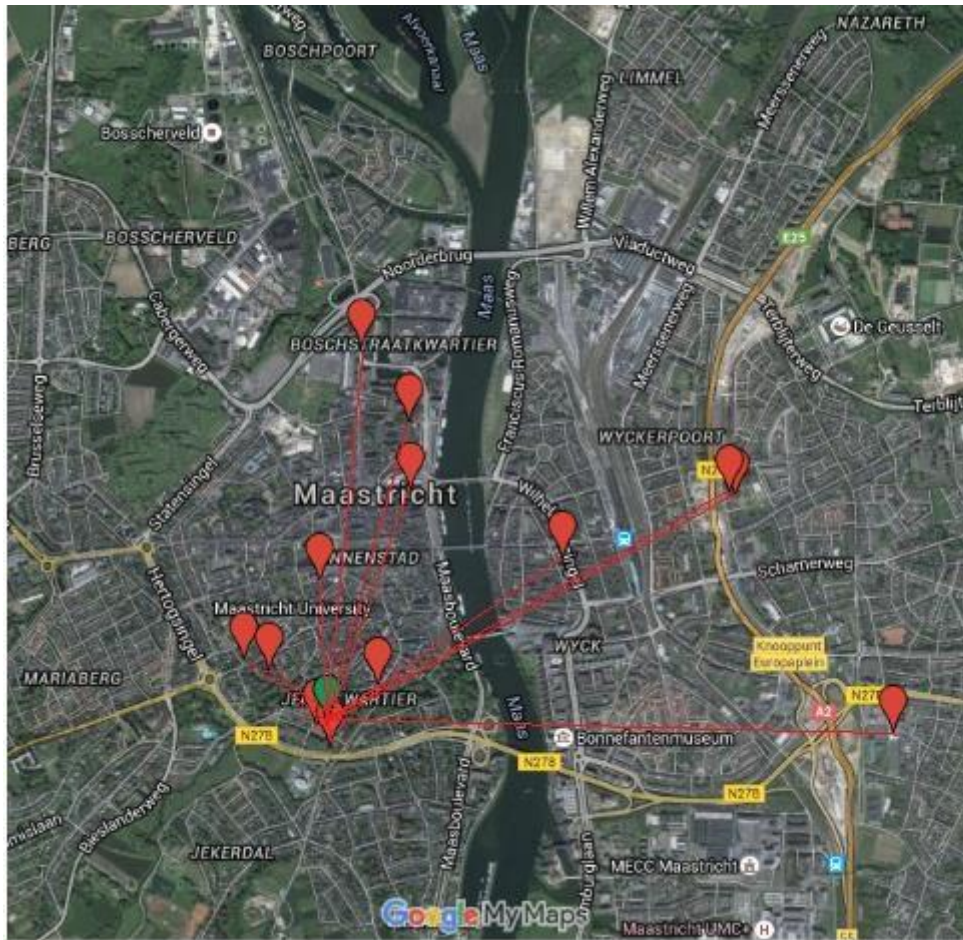
1.   Using online maps such as google maps (https://www.google.nl/maps) one should type in the addresses of all partners.

2.   To do this in google maps, simply go to the website, open the menu and click on "my places".

3.   Afterwards type in the info required and select the connector tool from the toolbar.

With the help of coordinating institutions, a further step to use the network analysis would be to reunite the network analysis of each hotspot and entities to establish which collaborators of the hotspot are also directly connected. Adding these secondary connections to the network analysis of the hotspot will highlight situations where the hotspot create unique and thus critical linkage between entities.

Appendix C: Combining the VCC with the CVP

To understand how it can improve its performance in every dimension, the next step for the hotspot is to combine its current Core Value Contribution diagram with the Value Creation Chain tool.
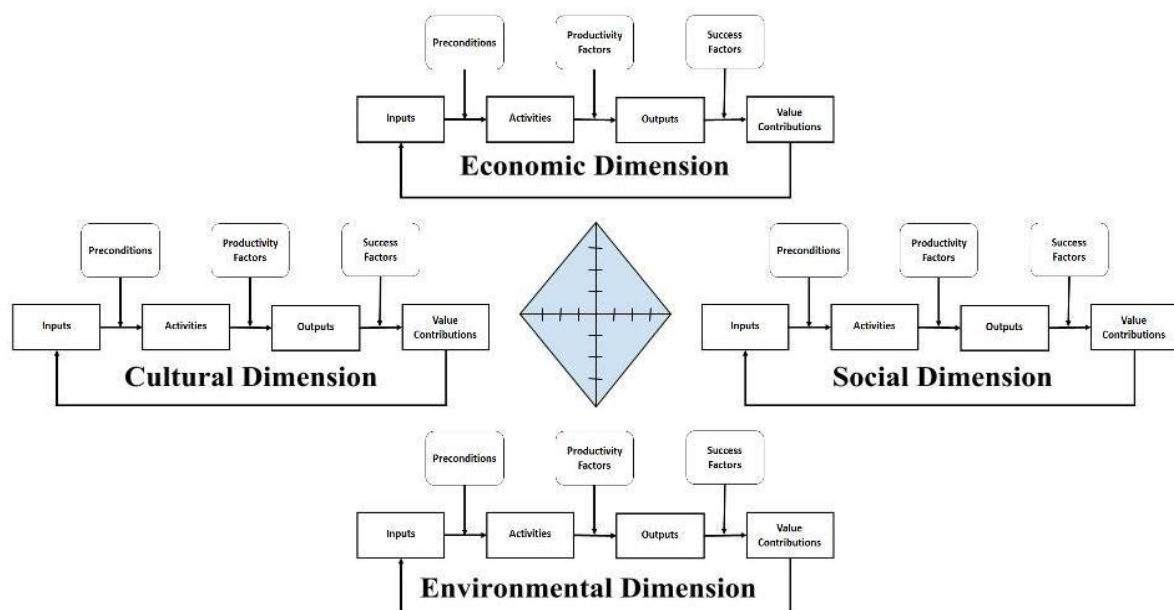
Appendix C.1: How to use the VCC for each dimension

For every dimension of its value creation, the hotspot can fill a Value Creation Chain to identify key factors in generating the value contributions covered by the statements. To fill the chains, the hotspot can first look at the inputs, outputs and activities used to measure the different contributions represented by the statements. For example, looking at the measurements used in the five statements about the X dimension, relevant inputs, activities and outputs can be linked to the five type of X contributions expressed by the statements.
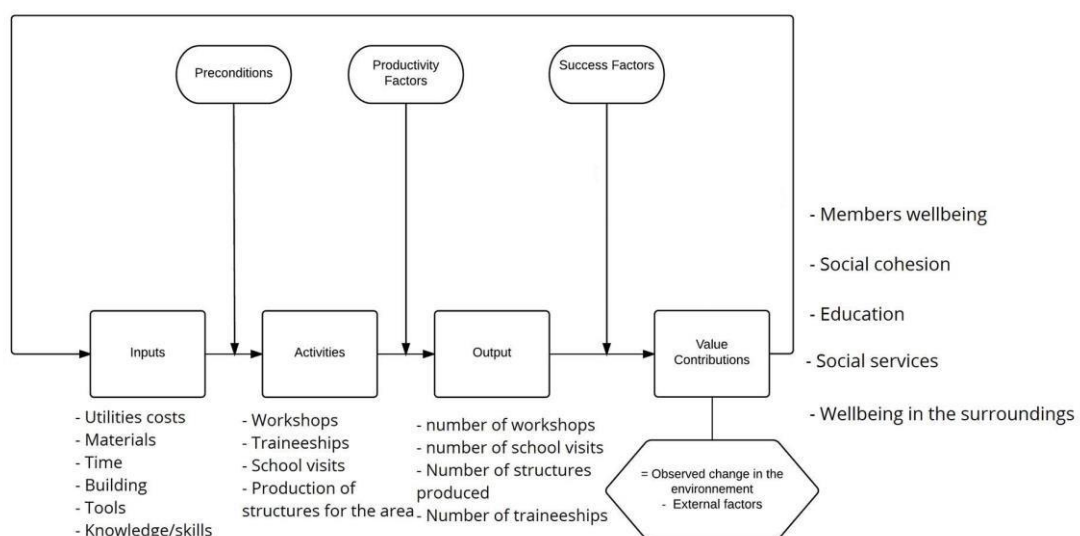
Step 1: Enter inputs, activities, outputs and value contributions

41

Once the hotspot has filled the base of the chain, relevant preconditions, productivity factors and success factors must be added when they are playing a significant role. To this end, the index can be used to identify which of these factors apply to the value dimensions under examination. Other preconditions, productivity factors and success factors than those suggested in the index of moderators can also be identified. We would then suggest to define and add these to the index to be able to reuse these in next measurements.

Social Value Contribution Chain
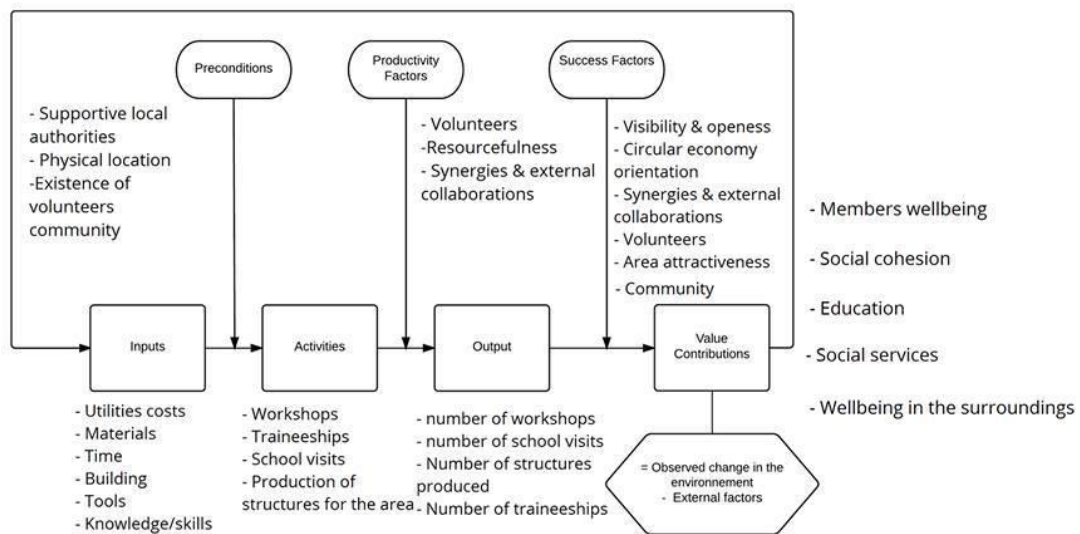
Step 2: Enter the moderators (e.g. preconditions, productivity and success factors)

The four chains can then be a way for the hotspot to understand which inputs, activities and outputs generate specific contributions. Further on, the hotspot will be able to identify the preconditions, productivity factors and success factors necessary to generate these contributions. The index of preconditions, productivity factors might come useful at this stage. Using these information, the hotspot and the stakeholders able to have an influence on the chain will be able to direct their action on the right aspects to achieve their objectives in creating the value pursued. In the next part of the appendix, four Value Contributions Chains corresponding to each value dimension are available for the hotspot to insert the relevant factors.

Appendix C.2: Value Contribution Chain for Economic Value
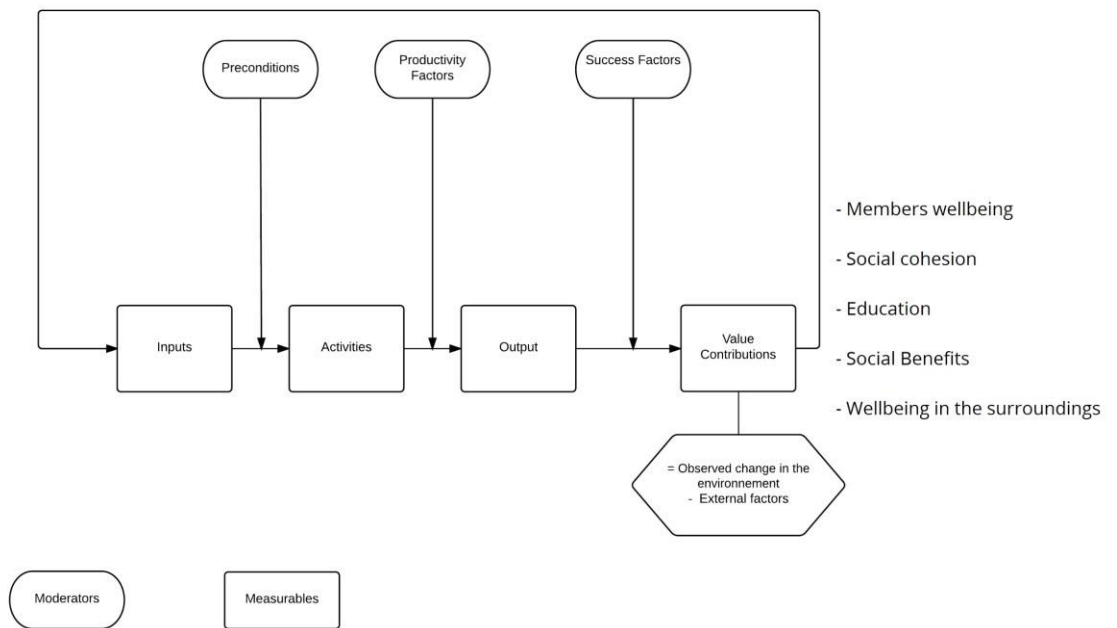
Economic Value Contribution Chain

- Financial performance

- Impact on local businesses

- Improvement in the quality of the production

- Customers / Sales improve

- Increase in land value

[Diagram: Inputs → Activities → Output → Value Contributions, with Preconditions, Productivity Factors, and Success Factors feeding in. Below Value Contributions: "= Observed change in the environnement - External factors". Separate shapes: Moderators, Measurables]
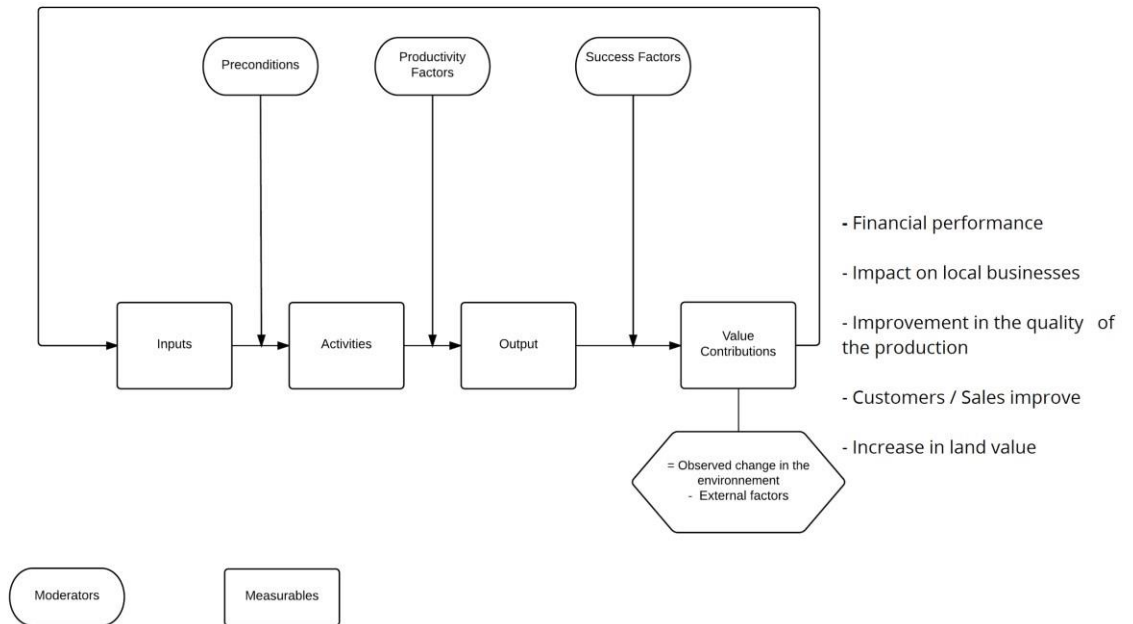
Observations and Recommendations:

…

Appendix C.3: Value Contribution Chain for Social Value

Social Value Contribution Chain

- Members wellbeing

- Social cohesion

- Education

- Social Benefits

- Wellbeing in the surroundings

Observations and Recommendations:

…

Appendix C.4: Value Contribution Chain for Environmental Value

Economic Value Contribution Chain
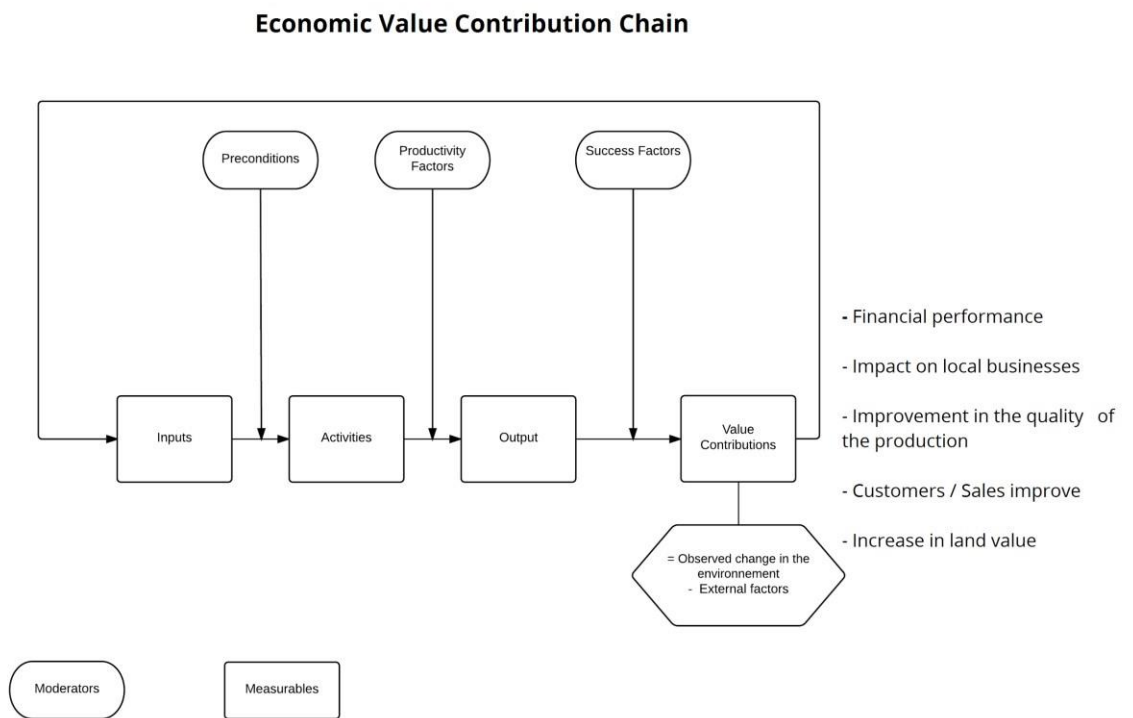
Observations and Recommendations:

…

Appendix C.5: Value Contribution Chain for Cultural Value

Environnemental Value Contribution Chain

- Reused / recycled inputs

- Sustainable outputs

- Promotion of sustainable lifestyle

- Collaborations with actors in the field of ecology

- Maintenance and regeneration of ecosystems
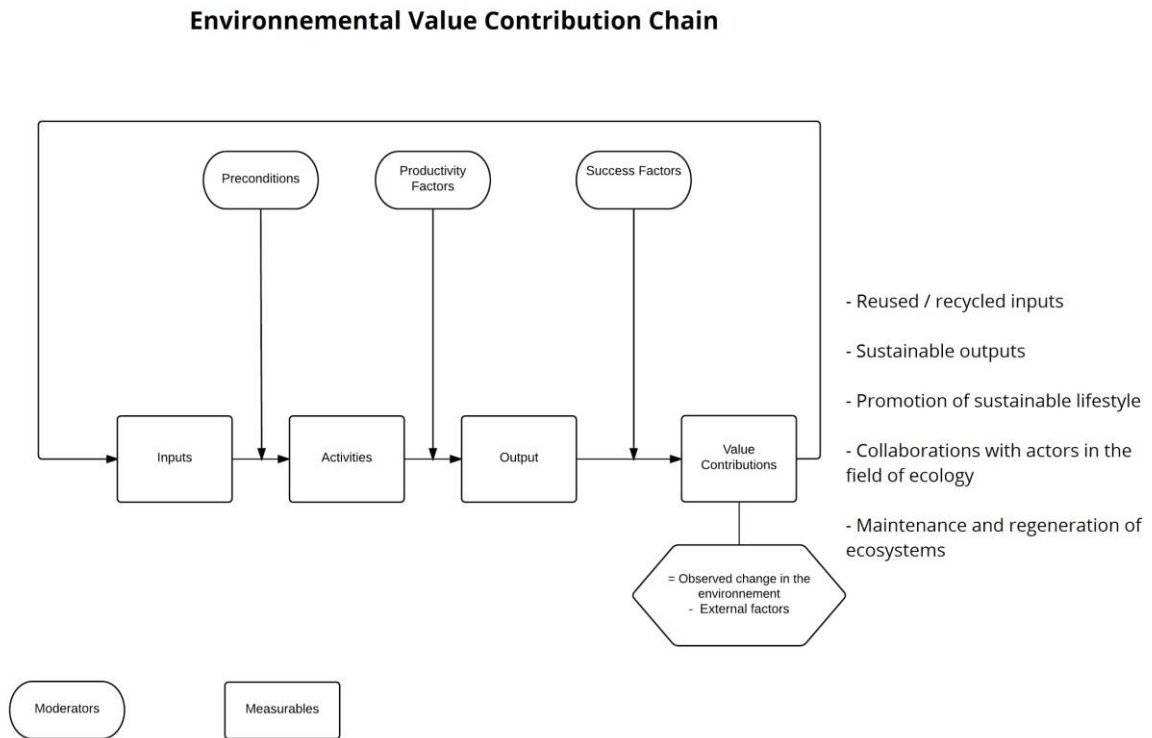
Observations and Recommendations:

…

Appendix C.6: Assessing the Progress achieved through the Measures taken

Once the hotspot has been able to identify initiatives, it may want to look back on these initiatives to understand how they influenced their performance. The way to do this is to compare the measurements obtained before and after the hotspot initiated the changes, by comparing with the initial assessment for example. Of course, not every measurement has to be compared, just those reflecting the objectives pursued through these modifications. For example, if the hotspot decides to connect with more volunteers to extend the reach of its outputs, it may want to look how the increase of number of volunteer has resulted in a greater attendance to its workshop and as a consequence to the hotspot's contribution to education for example. While the link between volunteers and education cannot appear obvious, such effect could result from the fact that an increase in the number of volunteers in contact with hotspot also represent a new potential audience for its workshops.

Appendix D: Index Appendix D.1: Preconditions Physical Location

This precondition refers to the fact that the members of the hotspots have a physical location where they can interact with one another directly and regularly. There is a distinction between the building appearing in the inputs and this concept of physical proximity. A physical location is a precondition to having regular collaborations and exchange of skills, inspiration and favors on a daily basis.

Critical Mass of Members

To generate significant synergies in terms of internal collaboration, visibility resulting in benefits for its members, a minimum number of members may be needed. On the other hand, a too important number of members can weaken the social links between the members of the hotspot.

Supportive Authorities

The authorities support to the hotspot can take different forms. It can be the allocation of a building under advantageous condition or financial support to the hotspot in the form of subsidies. But this support can also take the form of legal arrangements enabling the hotspot to conduct its activities under appropriate conditions or the collaboration between public institutions and the hotspot to organize artistic structures and events.

Urban Void

Urban voids are spaces and complexes where activities have been undergoing in the past but are now abandoned. Creative hotspots can settle into these areas and transform them into an area of leisure and culture. From the point of view of the hotspot, filling an urban void allows to benefit from potentially high public expectations toward the opening of the area, which can translates into positive support from the population and in increased frequentation. From the point of view of landowners, using creative hotspots as "pioneer" reduce maintenance costs of the compound and increase the perceived value of the area by transforming an empty area into a busy one, giving a "considerable boost to future development".

Existence of Volunteers' Community

The presence of volunteering organization in the city in which the hotspot operates is an important precondition for hotspot.

Appendix D.2: Productivity Factors Volunteers

A hotspot can use volunteers to increase the quantities of workshops, exhibitions and products generated. Volunteers can help by participating to the organization of workshops and events but also by contributing to the construction of products. Furthermore, the public can finance projects of the hotspot through crowdfunding campaigns.

Resourcefulness of the Organization

The organization resourcefulness is the organization's capacity to improvise and to make the best out of the resources at its disposition. A resourceful hotspot enables it to conduct its daily activities by taking initiative to reach its objective in the absence of regular external support.

Circular Business Model

A circular economy is one that reuse or recycles wastes in its processes. In the case of creative hotspots, this translates into the way the hotspots make use of waste material and manage the wastes resulting from its activities. In terms of productivity, the use made of recycled materials can play a conflicting role. On one hand, recycled materials reduced materials costs for those who use it. On the other hand, recycling materials can sometime requires a longer time compared to using traditional materials.

Community & Internal Collaboration

Community dynamics refers to the extent to which members of the hotspots collaborate with one another and the impact of these collaborations on the quantity and quality of the products and services created. These collaborations can take the form of joint projects, co-creation, exchange of services but also the training to new skills that can occur between members of the hotspot. A greater internal collaboration can also allow members of the hotspots to focus more on their strong points and to specialize in these domains.

Collaboration and interaction in the hotspot can be encouraged by inviting members to contribute to the overall organization of the hotspot and by organizing meeting places where members can interact. Spatial factors like the organization of the space can also enhance interaction in the hotspot. Open space, for example is a spatial disposition enhancing interaction.

Synergies and External Collaboration

Collaboration with other organizations can improve the productivity of a hotspot by opening access to a wider pool of resources. Indeed, partnering organization can offer the hotspot with

places to organize workshops and exhibitions, lend tools and machinery or connect the members of the hotspots with an extended network of clients and suppliers.

Support from Local Authorities

Local institutions can positively influence hotspot's productivity by supporting the members of the hotspot with legal matters and other practicalities when settling the hotspot in early stage or by providing the hotspots with tools directed at assisting the hotspot with the management of its activities.

Appendix D.3: Success Factors Area Attractiveness

The attractiveness of an area to the general public can be an important success factor for the hotspot to reach a significant amount of visitors. The attractiveness of an area can depend of the popularity and frequentation of neighboring buildings but the hotspot can also contribute to the attractiveness of the area by transforming its surroundings by deploying the creativity of its members to decorate the surroundings. The attractiveness of the area can become a key success factor in situations where the hotspot's success relies on important public frequentation but does not have strong communication channels.

Communication Channels

The performance of a hotspot's communication channels and its ability to increase frequentation through the use of social media's, websites and newsletter or through press release in local newspaper are important factors contributing to the hotspot's reach.

Visibility and Openness to the Public

The visibility of the hotspot, its capacity to communicate its presence and to invite visitors of the area can be important success factors increasing the frequentation of the hotspot, especially when the hotspot is located in a frequented area. The openness of the hotspot and its relation with the public is also important for hotspot looking to maximize the cultural value they generate. Hotspots can also be more open to the public by incorporating activities oriented to the public like shops and restaurants.

Synergies and External Collaborations

Collaborations with other organization can extend the reach of the hotspot by allowing the hotspot to benefit from the visitors and client base of other organizations. Furthermore, collaborating with other hotspots can unlock synergies and allow hotspots to access new

channels of exposure by selling products and participating in exhibitions or workshops in other places and, the other way around can be an opportunity for the hotspot to diversify its cultural offering. These synergies between organizations can also result in new business when other organization need the hotspot's expertise. On a local level, the existence of synergies with neighboring businesses can significantly the attractiveness of hotspots oriented toward the sales of their creation. Indeed, when neighboring organizations are also specialized in the domain of arts, frequentation of the area by potential customers will increase from the numbers of creative products available in the area the hotspot is located.

Community and Internal Collaboration

The hotspot's members can benefit from one another network to extend their reach. Moreover, the presence of a community of creative is a driver of attractiveness because it creates a hub where visitors and clients can find a diversity of cultural offerings.

Circular Business Model

The hotspot's orientation toward recycling and reusing materials in its activities can have a positive role on the hotspot's products and services attractiveness by making them more unique and memorable in the eye of the public. This attractiveness can also be present in the building in which the hotspot is settled, in cases where having a hotspot in a building whose first purpose was different make the hotspot unexpected and contributes to hotspot's cultural value.

Volunteers

The use of volunteers for cultural creation positively influence the frequentation and usage of the final product because people who participated in its development will be aware of the project. Furthermore, volunteers' involvement creates a sense of ownership toward the created project, enhancing the chance that volunteers will actually make use of it.

Support from Local Authorities

Local authorities can also contributes to the hotspot's success in reaching out to customers and organization by setting institutions to create links between the hotspot and potential partners or by organizing reunions of the cultural initiative present in the city. Finally, local government can contribute to the success of socially oriented hotspots by redirecting social groups in need of inclusion toward the hotspot.

Appendix E: Using Google Forms to create Online Questionnaires

This excerpt can be retrieved from https://support.google.com/docs/answer/87809?hl=nl. It provides a short introduction on how to create a questionnaire using google forms in Dutch. This has been copied. **Een enquête maken met Google Formulieren**

Met Google Formulieren kunt u op makkelijke en efficiënte wijze evenementen plannen, enquêtes rondsturen, polls houden, leerlingen overhoren of andere gegevens verzamelen. U kunt een formulier maken vanuit Google Drive of vanuit een bestaande spreadsheet die de reacties op uw formulier kan registreren.

1. Ga naar docs.google.com/forms.
2. Klik op de plusknop + in de rechterbenedenhoek.
3. Er wordt automatisch een nieuw formulier geopend.

In de formuliersjabloon kunt u alle gewenste vragen toevoegen. U kunt uw formulier ook indelen door koppen toe te voegen en uw formulieren in meerdere pagina's te splitsen. Meer informatie over het bewerken van formulieren.

Opmerking: U kunt ook een formulier maken in Google Drive. Ga hiervoor naar drive.google.com en klik op **Nieuw** > **Meer** > **Google Formulieren**.

Een vraag toevoegen

1. Open een formulier.
2. Klik op Toevoegen ⊕.
3. Kies een van de volgende typen vragen (naast de titel van de vraag):

   ○ Kort antwoord ▬

   ○ Alinea ≡

   ○ Meerkeuze ◉

   ○ Selectievakje ☑

   ○ Dropdown-menu ⊝: mensen kunnen een antwoord uit een menu kiezen.

   ○ Lineaire schaal ⋯: mensen kunnen iets beoordelen op een schaal met getallen.

   ○ Meerkeuzeraster ▦: mensen kunnen punten op een raster kiezen.

   ○ Datum 📅

   ○ Tijd 🕐

4. Typ de mogelijke antwoorden op je vraag. Wil je voorkomen dat respondenten een vraag niet invullen, schakel Verplicht dan van Uit naar Aan.

Een formulier e-mailen

1. Open het formulier.
2. Klik op **Verzenden** in de rechterbovenhoek.
3. Voeg de e-mailadressen toe waar u het formulier naartoe wilt sturen, samen met het onderwerp en het bericht van de e-mail.
4. Klik op **Verzenden**.

Een link naar het formulier genereren

U kunt een link naar het formulier genereren als u het formulier wilt delen via een chat- of emailbericht.

1. Open het formulier.
2. Klik op **Verzenden** in de rechterbovenhoek.
3. Klik op het linkpictogram boven aan het venster.
4. Klik op **Kopiëren** en druk op **Ctrl**+**C of Cmd**+**C** op uw toetsenbord om de link die wordt weergegeven te kopiëren.

Een formulier delen op social media

1. Open het bestand.
2. Klik op **Verzenden** in de rechterbovenhoek.
3. Kies een van de pictogrammen voor Google+, Twitter of Facebook.
4. Volg de instructies om het formulier te delen.

Een formulier insluiten in een website of blog

1. Open het formulier.
2. Klik op **Verzenden** in de rechterbovenhoek.
3. Klik op het insluitingspictogram boven aan het venster.
4. Klik op **Kopiëren** om de HTML-code die wordt weergegeven te kopiëren.
5. Plak de HTML-code in uw website of blog.